

RB

1

P4

v. 3

no. 2

Biological
& Medical
Serials

Toronto University Library
Presented by

The Pathological Society
through the Committee formed in
The Old Country
to aid in replacing the loss caused by
The disastrous Fire of February the 14th 1890



P
M. ed
P

(REPORT

OF

THE PROCEEDINGS

OF THE

PATHOLOGICAL SOCIETY OF LONDON.)

111

Transactions

— vol. 3^{pt 2}

—
(SIXTH SESSION 1851-52.)
—

LONDON:

PRINTED BY SAMUEL BENTLEY AND CO.,
BANGOR HOUSE, SHOE LANE.

7646

OFFICERS AND COUNCIL

OF

The Pathological Society of London.

ELECTED AT THE GENERAL MEETING, JANUARY 6TH, 1852.

President.

CÆSAR H. HAWKINS, Esq.

Vice-Presidents.

PETER MERE LATHAM, M.D.
HENRY BENICE JONES, M.D., F.R.S.
CHARLES J. B. WILLIAMS, M.D., F.R.S.
THOMAS B. PEACOCK, M.D.
WILLIAM FERGUSON, Esq., F.R.S.
RICHARD PARTRIDGE, Esq., F.R.S.
EDWARD STANLEY, Esq., F.R.S.
ALEXANDER SHAW, Esq.

Treasurer.

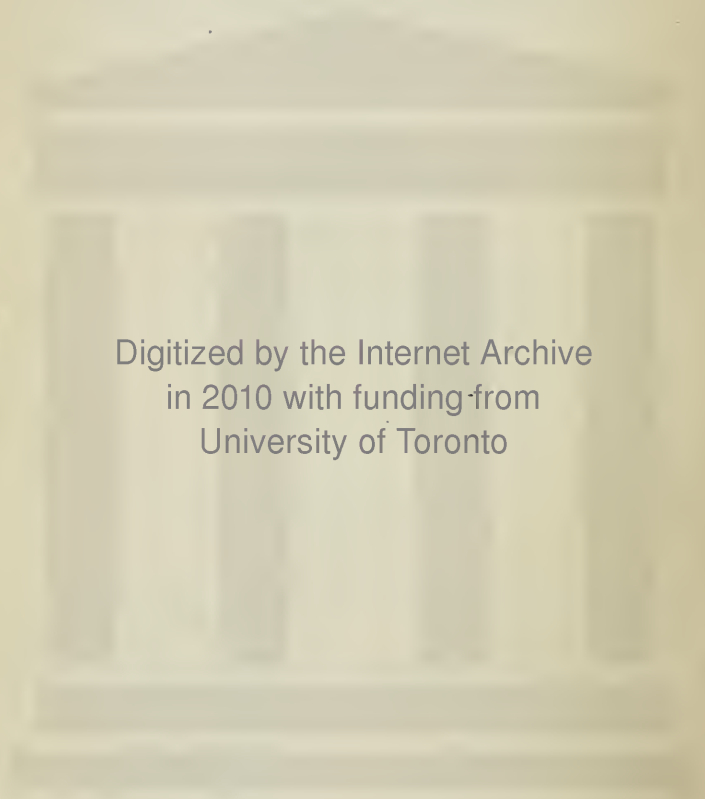
JAMES COPLAND, M.D., F.R.S.

Council.

EDWARD BENTLEY, M.D.	WILLIAM ADAMS, Esq.
WILLIAM BRINTON, M.D.	JOHN AVERY, Esq.
WILLIAM JENNER, M.D.	WILLIAM COULSON, Esq.
WILLIAM JOHN LITTLE, M.D.	PRESCOTT HEWETT, Esq.
WILLIAM MACINTYRE, M.D.	ALFRED POLAND, Esq.
JOHN SCOTT, M.D.	SAMUEL SOLLY, Esq., F.R.S.
T. OGIER WARD, M.D.	JOHN GAY, Esq.
JOHN HALL DAVIS, M.D.	JAMES DIXON, Esq.
ROBERT BEITH, M.D., R.N.	ROBERT WOOLLASTON, Esq.
CHARLES JOHN HARE, M.D.	CARSTEN HOLTHOUSE, Esq.

Honorary Secretaries.

RICHARD QUAIN, M.D. | GEORGE POLLOCK, Esq.



Digitized by the Internet Archive
in 2010 with funding from
University of Toronto

LIST OF MEMBERS OF THE SOCIETY.

Honorary Members.

- ALISON, WILLIAM PULTENEY, M.D., F.R.S., Professor of Medicine in the University of Edinburgh.
- ANDRAL, G., M.D., Professor in the Faculty of Medicine, Paris.
- BENTLEY, EDWARD, M.D. (formerly Secretary), Physician to the City of London Hospital for Diseases of the Chest, Hackney.
- CARSWELL, Sir ROBERT, M.D., Physician to his Majesty the King of the Belgians, Brussels.
- CRAMPTON, Sir PHILIP, Bart., Surgeon-General to the Forces in Ireland.
- CRUVEILHIER, J. C., M.D., Professor in the Faculty of Medicine, Paris.
- HENLE, J., Professor of Anatomy and Physiology in the University of Zurich.
- ROKITANSKY, CARL, M.D., Professor of Pathological Anatomy in the University of Vienna.
- STOKES, WILLIAM, M.D., Regius Professor of Physic in the University of Dublin.
- VOGEL, JULIUS, M.D., Professor of Clinical Medicine in the University of Giessen.

Resident and Non-Resident Members.

- (C.) Present Members of Council. * Former Members of Council.
-

ORIGINAL MEMBERS, AND MEMBERS ELECTED IN SESSION 1846—47.

- Adams, William, Esq., (C.) Demonstrator of Morbid Anatomy at St. Thomas's Hospital, and Assistant Surgeon to the Royal Orthopædic Hospital, 31, New Broad Street.
- * Arnott, James Moncrieff, Esq., F.R.S., 2, New Burlington-street.
- Ashwell, Samuel, M.D., 16, Grafton-street, Bond-street.
- Avery, John, Esq., (C.) Surgeon to the Charing Cross Hospital, 3, Queen-street, May Fair.

- Babington, Benjamin Guy, M.D., F.R.S. (late V. P.), Physician to Guy's Hospital, 31, George-street, Hanover-square.
- Barker, Thomas Herbert, M.D., Priory-terrace, Bedford.
- *Barlow, George Hilario, M.D., Physician to Guy's Hospital, 5, Union-street, Southwark.
- Bennet, James Henry, M.D., 9, Cambridge-square, Hyde-park.
- *Bennett, James Risdon, M.D., Physician to St. Thomas's Hospital, and to the City of London Hospital for Diseases of the Chest, 15, Finsbury-square.
- *Birkett, John, Esq., Demonstrator of Anatomy at, and Assistant Surgeon to, Guy's Hospital, 6, Wellington-street, Southwark.
- *Bright, Richard, M.D., F.R.S. (late V. P.), Physician Extraordinary to the Queen, 11, Saville-row.
- Brinton, William, M.D., (C.) Medical Tutor, and Demonstrator of Anatomy, in King's College, residence King's College.
- Brooke, Charles, M.B., F.R.S., Lecturer on General Anatomy and Physiology in the Westminster Hospital School of Medicine, 29, Keppel-street, Russell-square.
- Browne, Joseph Hullet, M.D., 29, Gordon-street, Euston-square.
- *Busk, George, Esq., F.R.S., Surgeon to the Hospital-ship "Dreadnought," 2, Gloucester-place, Greenwich.
- Callaway, Thomas, Esq., Demonstrator of Anatomy at Guy's Hospital, 7, Wellington-street, London Bridge.
- Camps, William, M.D., Physician to the Farringdon Dispensary, 52, Park-street, Grosvenor-square.
- *Chevers, Norman, M.D., H.E.I.C.S.
- *Cock, Edward, Esq., Surgeon to Guy's Hospital, 12, St. Thomas's-street, Borough.
- Cohen, Daniel Whitaker, M.D., Assistant Physician to St. Thomas's Hospital, 6, Cleveland-row, St. James's.
- Copeland, James, M.D., F.R.S. (Treasurer), 5, Old Burlington-street.
- Coulson, William, Esq., (C.) Surgeon to St. Mary's and the Magdalen Hospitals, Frederick's-place, Old Jewry.
- *Crisp, Edwards, M.D., Physician to the Metropolitan Dispensary, 21, Parliament-street.
- Davis, John Hall, M.D., (C.) Physician to the Royal Maternity Charity, 17, Russell-place, Fitzroy-square.
- *Davies, Herbert, M.D., Assistant Physician to the London Hospital, 23, Finsbury-square.
- *Day, George E., M.D., Professor of Anatomy and Medicine in the University of St. Andrews, 1, St. Andrews.
- Dixon, James, Esq., (C.) Surgeon to the Royal London Ophthalmic Hospital, 45, Green-street, Park-lane.
- Dudgeon, Robert E., M.D., 82, Gloucester-place, Portman-square.
- Ellis, Joseph, Esq., Sudbrook Park.

*Erichsen, John E., Esq., Professor of Surgery in University College, and Surgeon to University College Hospital, 48, Welbeck-street, Cavendish-square.
Fincham, George, M.D., Physician to the Western and to the Bishop's Court Dispensaries, 28, Chapel-street, Belgrave-square.

Forster, John Cooper, Esq., Surgeon to the Surrey Dispensary, 11, Wellington-street, London Bridge.

Frere, J. C., Esq., Trinity College, Cambridge.

Fuller, Henry, M.D., Assistant Physician to St. George's Hospital, 13, Manchester-square.

*Garrod, Alfred Baring, M.D., Professor of Materia Medica in University College, and Physician to University College Hospital, 63, Harley-street, Cavendish-square.

Gay, John, Esq., (C.) Surgeon to the Royal Free Hospital, 10, Finsbury-place South.

Greame, George T., M.D., 2, Upper Brook-street.

Hawkins, Cæsar H., Esq. (President), Surgeon to St. George's Hospital, 26, Grosvenor-street.

Hensley, Frederick John, M.D., 30, Montague-place.

Hewett, Prescott G., Esq., (C.) Lecturer on Anatomy at, and Assistant Surgeon to, St. George's Hospital, 35, Hertford-street, May-fair.

Hillman, W. A. Esq., Surgeon to the Farringdon Dispensary, 1, Argyll-street.

*Hilton, John, Esq., F.R.S., Surgeon to Guy's Hospital, 10, New Broad-street.

Holman, H. Martin, M.D., Hurstpierpoint, Sussex.

Holthouse, Carsten, Esq., (C.) Surgeon to the Public Dispensary, Bishop's-court, Lecturer on Anatomy in the Westminster Hospital School of Medicine, 2, Serle-street, Lincoln's-inn-fields.

Jay, Edward, Esq., 51, Park-street, Grosvenor-square.

*Jearesson, Henry, M.D., Assistant Physician to St. Bartholomew's Hospital, and Consulting Physician to the City of London Hospital for Diseases of the Chest, 2, Finsbury-square.

Jenner, William, M.D., (C.) Professor of Pathology in University College, and Assistant Physician to University College Hospital, 8, Albany-street, Regent's Park.

*Johnson, George, M.D., Assistant Physician to King's College Hospital, and, Physician to the Bishop's Court Dispensary, 3, Woburn-square.

*Johnson, Henry Charles, Esq., Lecturer on Medical Jurisprudence at, and Assistant Surgeon to, St. George's Hospital, 6, Saville-row.

*Jones, Henry Bence, M.D., F.R.S., (V.P.) Physician to St. George's Hospital, 30, Grosvenor-street.

Jones, Charles Handfield, M.D., F.R.S. Assistant Physician to St. Mary's Hospital, 1, Southwick-place, Cambridge-square.

Kent, Thomas J., Esq., Guy's Hospital.

Lever, John C. W., M.D., Physician Accoucheur to, and Lecturer on Midwifery at, Guy's Hospital, 12, Wellington-street, London Bridge.

*Lloyd, Edward, M.D., Demonstrator of Morbid Anatomy at Guy's Hospital, and Physician to the Royal General Dispensary, 50, Jewin-street.

Macintyre, William, M.D., (C.) Physician to the Western General Dispensary, 84, Harley-street.

Marshall, John, Esq., Assistant Surgeon to University College Hospital, 10, George-street, Hanover-square.

Merriman, S. W. J., M.D., Physician to the Royal Infirmary for Children, 34, Brook-street, Grosvenor-square.

Morison, Sir Alexander, Physician to Bethlem Hospital, 26, Cavendish-square.

Morgan, John, Esq., 5, Albion-place, Hyde-park-square.

*Partridge, Richard, Esq., F.R.S., (V.P.), Surgeon to King's College Hospital, and Professor of Anatomy in King's College, 17, New-street, Spring Gardens.

*Peacock, Thomas Beville, M.D. (V.P. late Secretary), Assistant Physician to St. Thomas's Hospital, and Physician to the City of London Hospital for Diseases of the Chest, 20, Finsbury Circus.

*Phillips, Benjamin, Esq., F.R.S., Lecturer on Surgery at, and Surgeon to, the Westminster Hospital, 17, Wimpole-street.

Pilcher, George, Esq., Surgeon to the Surrey Dispensary, 2, Harley-street.

Poland, Alfred, Esq., (C.) Assistant Surgeon to Guy's Hospital, 3, St. Thomas's-street, Southwark.

Pollock, George D., Esq., (Honorary Secretary), Surgeon to North London Eye Infirmary, and Lecturer on Anatomy at St. George's Hospital, 27, Grosvenor-street.

*Quain, Richard, M.D. (Honorary Secretary), Assistant Physician to the Hospital for Consumption and Diseases of the Chest at Brompton, 23, Harley-street, Cavendish-square.

*Ramsbotham, Francis H., M.D., (late V.P.) Lecturer on Obstetric Medicine at, and Physician Accoucheur to, the London Hospital, Portman Square.

Ray, Edward, Esq., Dulwich.

Ridge, Joseph, M.D., 39, Dorset-square.

Robinson, R. R., Esq., Camden-row, Camberwell.

*Roe, Hamilton George, M.D., Lecturer on Medicine, Physician to the Westminster Hospital, and to the Hospital for Consumption and Diseases of the Chest, at Brompton, 26, Upper Brook-street.

Sankey, W. H. O., M.B., Resident Medical Officer, London Fever Hospital.

Scott, John, M.D., (C.) 13, Stratton-street.

Seaton, Edward C., M.D., Surgeon to the Chelsea, Brompton, &c. Dispensary, 77, Sloane-street, Knightsbridge.

Sharp, H. L., Esq., 39, Porchester-terrace, Hyde Park.

- *Shaw, Alexander, Esq., (V. P.) Lecturer on Surgery at, and Surgeon to, the Middlesex Hospital, 25, Henrietta-street, Cavendish-square.
- *Simon, John, Esq., F.R.S., Lecturer on Pathology at, and one of the Surgical Staff of, St. Thomas's Hospital, 3, Lancaster-place, Strand.
- *Smith, Ebenezer Pye, Esq., 7, Billiter square.
- Smith, Protheroe, M.D., Physician to the Hospital for women, 25, Park-street, Grosvenor-square.
- Stafford, Richard A., Esq., F.R.S., Surgeon to the Marylebone Infirmary, 28, Old Burlington-street.
- Tamplin, R. W., Esq., Surgeon to the Royal Orthopædic Hospital, 33, Old Burlington-street.
- *Toynbee, Joseph, Esq., F.R.S., Surgeon Aurist to St. Mary's Hospital, 18, Saville-row.
- Waite, Charles, M.D., 3, Old Burlington-street.
- Walsh, Charles Robert, Esq., 42, Halfmoon-street, Piccadilly.
- Walton, Henry Haynes, Esq., Assistant Surgeon to St. Mary's Hospital, 69, Brook-street.
- Ward, Joseph, Esq., Epsom, Surrey.
- *Ward, Nathaniel, Esq., (formerly Secretary), Demonstrator of Anatomy at, and Assistant Surgeon to, the London Hospital, 1, Broad-street Buildings.
- Ward, T. Ogier, M.D., (C.) Surgeon to the Kensington Dispensary, 9, Leonard-place, Kensington.
- Ware, James T., Esq., Surgeon to the Finsbury Dispensary, 51, Russell-square.
- Williams, C. J. B., M.D., F.R.S., (V.P., formerly President), Consulting Physician to the Hospital for Consumption and Diseases of the Chest at Brompton, 49, Upper Brook-street.
- Woollaston, Robert, Esq., (C.) 13, Conduit-street West, Hyde-park.

MEMBERS ELECTED DURING THE SESSION 1847—48.

- Aikin, C. A., Esq., 8, Albion-street, Hyde-park.
- Fergusson, William, Esq., F.R.S. (V.P.), Professor of Surgery in King's College, and Surgeon to the King's College Hospital, 16, George-st., Hanover-square.
- Hare, Charles John, M.D., (C.) Assistant Physician to University College Hospital, 9, Langham-place.
- Heale, James Newton, M.D., 11, Westbourne-crescent.
- Miller, James, M.D., 40, Welbeck-street, Cavendish-square.
- Palmer, Henry Smith, Esq., Mortlake.
- Randall, John, M.D., 14, Portman-street, Portman-square.
- Sieveking, E. H., M.D., Assistant Physician to St. Mary's Hospital, 3, Bentinck-street, Manchester-square.
- Solly, Samuel, Esq., F.R.S., (C.) Assistant Surgeon to St. Thomas's Hospital, 13, St. Helen's-place.
- Tuke, T. Harrington, M.D., Manor-house, Chiswick.

MEMBERS ELECTED DURING THE SESSION 1848—49.

- Bird, James, M.D., 27, Hyde-park-square.
 Carpenter, William Guest, Esq., Surgeon to the City of London Dispensary, 1 West-street, Finsbury-circus.
 Chalk, William Oliver, Esq., 3, Nottingham-terrace, Regent's-park.
 Critchett, George, Esq., (formerly Secretary), Lecturer on Surgery at, and Assistant Surgeon to, the London Hospital, 46, Finsbury-square.
 Eden, T. E., Esq., 45, Threadneedle-street.
 Gray, Henry, Esq., F.R.S., 3, Wilton-street.
 Henry, Mitchell, Esq., Lecturer on Morbid Anatomy at, and Assistant Surgeon to, the Middlesex Hospital, 5, Harley-street.
 Hogg, Charles, Esq., 14, Finsbury-place South.
 Houlton, Joseph, Jun. Esq., 105, Lisson-grove.
 Little, William John, M.D., (C.) Lecturer on Medicine at, and Physician to, the London Hospital, 10, Finsbury-square.
 Purnell, John James, Esq., Surgeon to the Royal General Dispensary, 34, Aldersgate-street, Charter-house-square.
 Sibson, Francis, M.D., F.R.S., Physician to St. Mary's Hospital, 40, Brook-street.
 Tebay, William, Esq., 6, Great Queen-street, Westminster.

MEMBERS ELECTED DURING THE SESSION 1849—50.

- Ballard, Thomas, Esq., 10, Southwick-place, Hyde-park.
 Beith, Robert, M.D., R.N., (C.) Greenwich Hospital.
 Birkett, Edmund Lloyd, M.D., Physician to the City of London Hospital for Diseases of the Chest, Curator of the Museum at Guy's Hospital, 4, Montague-street, Russell-square.
 Blagden, Robert, Esq., Surgeon to the St. George's and St. James's Dispensary, 42, Curson-street, May Fair.
 Canton, Edwin, Esq., Lecturer on Anatomy in the Charing Cross Hospital School of Medicine, Assistant Surgeon to the Royal Westminster Ophthalmic Hospital, 31 A, Saville-row.
 Clarke, John, Esq., Physician-Accoucheur to St. George's and St. James's Dispensary, 3, Clifford-street.
 Cooper, George F., M.D., Brentford.
 Fincham, Warren, Esq., 5, Spring-gardens.
 Foreman, R.C., M.D., Colville House, Lowestoft.
 Habershon, Samuel O., M.D., Demonstrator of Anatomy at Guy's Hospital, 48, Finsbury-circus.
 Holt, Barnard, Esq., Surgeon to the Westminster Hospital, 5, Parliament-street.
 Latham, Peter Mere, M.D., (V.P., late President), 37, Grosvenor-street.
 Liddell, Sir John, C.B., M.D., F.R.S., Medical Inspector, Greenwich Hospital.
 Littler, J. W., Esq, Edmonton.

MEMBERS ELECTED DURING THE SESSION 1850—51.

- Baly, William, M.D., Physician to the Penitentiary, Millbank, 45, Queen Ann-street, Cavendish-square.
- Benwell, Henry D., Esq., 2, Kent-place, Blackheath-hill.
- Black, James Hurdis, M.D., 3, Morden-terrace, Greenwich.
- Bowman, William, Esq., F.R.S., Professor of Physiology in King's College, and Assistant Surgeon to King's College Hospital, 5, Clifford-street.
- Bristowe, J. S., M.B., Demonstrator of Morbid Anatomy, and Curator of the Museum at St. Thomas's Hospital, North Addington-place, Camberwell.
- Bullock, Henry, Esq., 15, Cumberland-street, Hyde-park.
- Cooper, William White, Esq., Surgeon Oculist to St. Mary's Hospital, 19, Berkeley-square.
- Dampier, Nathaniel John, Esq., Surgeon to the Islington Dispensary, 56, Woburn-place, Russell-square.
- Garrett, Mark Brown, Esq., 3, New-road, St. George's East.
- Hodgson, Joseph, Esq., F.R.S., 60, Westbourne-terrace.
- Hore, Henry A., Esq., House Surgeon, Bristol Infirmary.
- Langmore, J. C., M.B., Surgeon to the Paddington Dispensary, 20, Oxford-terrace.
- Maxwell, W. B. C., M.D., Resident Medical Officer, Idiot Asylum, Highgate.
- Obré, Henry, Esq., 12, Grove-place, Lisson-grove.
- Ogle, J. W., M.B., 31, Queen-street, May Fair.
- Pollock, James Edward, M.D., Physician to the Western General Dispensary, 4, Chandos-street, Cavendish-square.
- Pyle, John, Esq., Surgeon to the North London Eye Infirmary, 56, Oxford-terrace, Hyde-park-square.
- Simmonds, James B., Esq., Royal Veterinary College.
- Snow, John, M.D., 18, Sackville-street.
- Stanley, Edward, Esq., F.R.S. (V.P.), Surgeon to St. Bartholomew's Hospital, 23 A, Brook-street.
- Sutherland, Alexander John, M.D., Physician to St. Luke's Hospital, 1, Parliament-street.
- Tatum, Thomas, Esq., Lecturer on Surgery at, and Surgeon to, St. George's Hospital, 3, George-street, Hanover-square.
- Wagstaff, W. R., M.D., 14, Cornwall-terrace, Regent's-park.
- West, Charles, M.D., Lecturer on Midwifery at, and Physician Accoucheur to, St. Bartholomew's Hospital, 96, Wimpole-street.
- Wood, John, Esq., Demonstrator of Anatomy, King's College.

MEMBERS ELECTED DURING THE SESSION 1851—52.

- Allchin, W. H., M.B., 7, Pembroke Villas, Westbourne-grove.
- Ashton, T. J., Esq., Surgeon to the Blenheim-street Dispensary, 31, Cavendish-square.

- Barclay, A. Whyte, M.D., Physician to the Chelsea, &c. Dispensary, 23 a, Bruton-street.
- Barlow, W. Frederick, Resident Medical Officer, Westminster Hospital.
- Beale, Lionel J., M.B., 27, Carey-street, Lincoln's Inn.
- Brodhurst, Bernard, Esq., Assist. Surgeon to the Royal Orthopædic Hospital, 14, Brook-st.
- Childs, G. B., Esq., Surgeon to City Police Force, 11, Finsbury-place, South.
- Chowne, W., M.D., Lecturer on Midwifery at, and Physician to, the Charing Cross Hospital, 8, Connaught-place, West, Hyde-park.
- Devenish, S. W., M.B., 34, Cambridge-street, Hyde-park.
- Drury, J. S., M.B., 44, Albion-street, Hyde-park.
- Duff, —, M.D., 53, Upper Seymour-street, Portman-square.
- Ely, G. E., M.D., Rochester.
- Field, C. A., Esq., 4, Stanhope-terrace, Hyde-park.
- Forbes, J. Gregory, Esq., Surgeon to the Western General Dispensary, 14, Devonport-street, Hyde-park.
- Gant, Frederick J., Esq., 13, Old Cavendish-street.
- Hacon, E. Dennis, Esq., Marc-street, Hackney.
- Hale, Robert J., M.D., Physician to the Western General Dispensary, 21, Finchley-road.
- Halley, Alexander, M.D., 14, Queen Anne-street.
- Hansard, Richard, Esq., Surgeon to the Radcliffe Infirmary, Oxford.
- Hawkins, Charles, Esq., 22, Saville-row.
- Kingdon, J. Abernethy, Esq., Surgeon to the City Dispensary, 2, New Bank-buildings.
- Lee, Henry, Esq., Assist. Surgeon to King's College Hospital, 13, Dover-street.
- Lonsdale, Edward, Esq., Surgeon to the Royal Orthopædic Hospital, 26, Montague-street, Russell-square.
- Mackenzie, F. W., M.D., Physician to the Paddington Dispensary for Diseases of Women, &c., 11, Chester-place, Hyde Park-square.
- Markham, W. O., M.D., Assist. Physician to St. Mary's Hospital, 33, Clarges-st.
- May, George, M.B., 21, George-street, Greenwich.
- M'Shane, Charles, Esq., R.N., Greenwich Hospital.
- Rooke, H. T., M.D., Assist. Surgeon to the Hospital Ship, "Dreadnought."
- Smith, Tyler, M.D., Physician Accoucheur to St. Mary's Hospital, 7, Upper Grosvenor-street.
- Taylor, Robert, M.D., Physician to the St. Pancras Royal General Dispensary, 82, Guildford-street.
- Thompson, Theophilus, M.D., F.R.S., Physician to the Hospital for Consumption and Diseases of the Chest, at Brompton, 3, Bedford-square.
- Todd, R. B., M.D., F.R.S., Professor of Anatomy and Physiology in King's College, and Physician to King's College Hospital, 3, New-street, Spring-gardens.
- Trotter, J. W., Esq., Resident Medical Officer, St. Mary's Hospital.
- Walker, J. Butterworth, Esq., 8, Hamilton-place, St. John's Wood.
- Welsh, H. James, Esq., 1, Dalston-terrace.

LIST OF SPECIMENS

EXHIBITED AT THE MEETINGS OF THE SOCIETY

DURING THE SESSION OF 1851 AND 1852.

DISEASES, ETC., OF THE NERVOUS SYSTEM.

1.
Diamond-shaped Head from }
Compression at Birth. } DR. OGIER WARD.
2.
Encephaloid growth in connec- }
tion with the Dura Mater, }
with portions of the Pelvic } DR. OGLE.
Bones and other Textures. }
3.
Hydrocephalic Head of a Male }
Child, aged four months. } MR. JOHN WOOD.
4.
Laceration of the Right Lateral }
Sinus, with extensive Ex- }
travasation of Blood between }
the Bone and the Dura } MR. PRESCOTT HEWETT.
Mater, the results of an In- }
jury. }
5.
Case of Fracture of the Skull, }
with injury to the Brain, }
complicated with Diseased } MR. GAY.
Kidney. }

6.

Two cases of Fracture of the Temporal Bone, with injury to the Brain, attended with Hæmorrhage and Serous Discharge from the Ear.	}	MR. CÆSAR HAWKINS.
---	---	--------------------

7.

Abscess of the Middle and Pos- terior Lobes of the Left Hemisphere of the Brain, associated with Rheumatic Symptoms.	}	DR. JAMES BIRD.
--	---	-----------------

8.

Crimson or Hæmatoid Crystals and Calcification of the Mi- nute Arteries of the Cere- brum.	}	DR. W. JENNER.
---	---	----------------

9.

General Softening of the Brain, with Abscess in the Left Cerebral Hemisphere, in con- nexion with Caries of the Temporal Bone.	}	DR. OGLE.
--	---	-----------

10.

Red and White Softening of the Right Hemisphere of the Brain.	}	DR. SIBSON.
---	---	-------------

11.

Hemiplegia—Epilepsy—Softening of a Corpus Striatum— Degeneration of the Minute Vessels.	}	DR. R. QUAIN.
--	---	---------------

12.

Tumor in the Posterior Lobe of the Right Hemisphere of the Brain.	}	J. C. LANGMORE, M.B.
---	---	----------------------

Report on this Specimen.

DR. R. QUAIN.

13.

Deposit of Fat within the Cervical portion of the Vertebral Canal.	}	MR. OBRÉ.
--	---	-----------

DISEASES OF THE RESPIRATORY ORGANS.

1.

A diseased Larynx and Trachea seven days after the operation of Tracheotomy.	}	MR. FERGUSSON.
--	---	----------------

2.

A Pharynx, Trachea, &c., showing a piece of Meat, a portion of which occupied the chink of the Glottis, causing Death by Suffocation.	}	DR. LIONEL BEALE.
---	---	-------------------

3.

Cancer of the Lungs, Pleuræ, Pericardium, Bronchial and other Glands.	}	DR. R. QUAIN.
---	---	---------------

4.

Cancer of the Posterior Mediastinum.	}	DR. W. JENNER.
--------------------------------------	---	----------------

5.

Encephaloid Tumour in the anterior Mediastinum.	}	DR. POLLOCK.
---	---	--------------

Report on this Specimen.		DR. R. QUAIN.
--------------------------	--	---------------

6.

Diseased Lungs, Spleen, and Kidneys, after Empyema.	}	DR. HAMILTON ROE.
---	---	-------------------

DISEASES OF THE HEART AND OF THE OTHER ORGANS OF CIRCULATION.

1.

Tuberculous Infiltration of the Heart and several parts of the Body of an Infant, the Lungs remaining free.	}	MR. HAYNES WALTON.
---	---	--------------------

2.
Hypertrophy of the Heart,
Pericarditis, extensive Effu-
sion into the Pericardium. } DR. POLLOCK.

3.
Fatty Degeneration of the
Heart, causing Death by
Rupture of the Left Ven-
tricle. } DR. R. QUAIN.

4.
Rupture of the Heart, conse-
quent on fatty Degeneration,
associated with softening of
the Brain. } DR. BALY.

5.
Fatty Degeneration of the
Heart, causing Death by
Rupture of the Left Ven-
tricle. } DR. R. QUAIN.

6.
Fatty Degeneration of the
Heart. Ossification of the
Aorta, Coronary Arteries,
and Mitral Valve. } DR. POLLOCK.

Report on this Specimen. MR. W. F. BARLOW.

7.
Fibrous Degeneration of, and
Deposits in, the Substance of
the Heart. } DR. RISDON BENNETT.

Report on this Specimen. DR. R. QUAIN.

8.
Fibrous Degeneration of, and
Deposits in the Substance of
the Heart, connected with
Acute Rheumatism. } DR. JAMES BIRD.

Report on this Specimen. DR. R. QUAIN.

9.
Fibrinous Deposit in the Walls }
of the Heart. } DR. OGLE.
- Report on this Specimen. DR. R. QUAIN.
10.
Extreme Contraction of the }
Tricuspid and Mitral Aper- }
tures, from old Endocarditis. } MR. E. PYE SMITH.
11.
Small Aneurism of the Left }
Ventricle and Mitral Valve. } DR. PEACOCK.
12.
Regurgitation through the Left }
Auriculo-Ventricular Aper- }
ture, from Dilatation of the }
Orifice. } DR. PEACOCK.
13.
Obstructive Disease of the }
Aortic Valves, dependent on }
Malformation—small Aneu- }
rism in the Ventricular }
Septum. } DR. PEACOCK.
14.
Obstructive and Regurgitant }
Disease of the Aortic Orifice. } DR. PEACOCK.
15.
Diseased and Malformed Aortic }
Valves. } DR. RISDON BENNETT.
- Report on this and similar cases. DR. PEACOCK.
16.
Malformation of the Aortic }
Valves. } DR. W. JENNER.
17.
Case of commencing Dilatation }
of one of the Segments of the }
Aortic Valve. } DR. OGLE.
18.
Diseased Aortic Valves. }
DR. PEACOCK, for
MR. E. PYE SMITH.

19.
Diseased Aortic Valves, with
general Hypertrophy of the
Heart. } DR. BRISTOWE.
20.
Malformation of the Pulmonary
Semilunar Valves. } DR. W. JENNER.
21.
Peculiar disposition of the
Large Vessels, producing a
Tumor at the Root of the
Neck. } MR. COULSON.
22.
Rupture of the Brachial Artery
ten days after compound dis-
location of the Elbow-joint. } MR. SHAW.
23.
Aneurism of the Aorta : with
a Description of the Morbid
Anatomy of the Recurrent
Nerve compressed by it. } DR. BRINTON.
24.
Small Aortic Aneurism opening
by minute Orifices. } MR. OBRÉ.
25.
Abdominal Aneurism, bursting
through the Diaphragm into
the Chest. } MR. OBRÉ.
26.
Aneurism of the Abdominal
Aorta, associated with Fatty
Degeneration of the Heart,
and of the small Blood-
vessels of the Cerebellum. } MR. W. F. BARLOW.
27.
Aneurism of the descending
Aorta, which caused death
by bursting into the Left
Bronchus. } DR. FULLER.

28.

Dilatation of the ascending and transverse portions of the Arch of the Aorta.	}	MR. OBRÉ.
---	---	-----------

DISEASES, ETC., OF THE ORGANS OF DIGESTION.

1.

Ulcerated Cancerous Tumour of the Right Anterior Arch of the Fauces.	}	MR. SHAW.
--	---	-----------

2.

Ulceration of the Œsophagus, perforating the Pericardium.	}	MR. J. W. TROTTER.
--	---	--------------------

3.

Colloid Disease of the Ab- dominal Viscera.	}	DR. R. QUAIN, and DR. W. JENNER.
--	---	-------------------------------------

4.

Sections of two large masses of Hair and String from the Stomach and Duodenum.	}	MR. POLLOCK.
--	---	--------------

5.

Sarcinæ from the Stomach of a Boy.	}	DR. BENICE JONES.
---------------------------------------	---	-------------------

6.

Hypertrophy of the Spleen.— Crystals in the substance of the Spleen (Splenic Mur- mur). — Ulceration of the Colon.	}	DR. C. J. HARE.
--	---	-----------------

7.

Examination of three speci- mens of Enlarged Spleen.	}	DR. HANDFIELD JONES.
---	---	----------------------

8.

Great Hypertrophy of the Spleen; diseased Heart and Kidneys.	}	DR. C. J. HARE.
--	---	-----------------

9.
Unorganized Deposit in the }
Spleen. } DR. OGLE.
10.
Enlarged Spleen, excess of }
White Corpuscles in the } DR. OGIER WARD.
Blood, Epistaxis, &c. }
11.
Abscess of the Liver, which }
opened into the Lung, con- } MR. MITCHELL HENRY.
secutive to Dysentery. }
12.
Hydatid Abscess of the Liver, }
opening into the Right } DR. BRISTOWE.
Pleural Cavity. }
13.
Extensive Laceration of the }
Liver, which the Patient } MR. WILLIAM ADAMS, for
survived Seven Weeks. } MR. MACKMURDO.
14.
Suppurative Peritonitis, the }
result of Abscess of the } DR. BRISTOWE.
Liver, causing Perforation of }
the Intestine and of the Ab- }
dominal Parietes. }
15.
Acute Abscess of the Liver }
consecutive to Enteritis. } DR. C. J. HARE.
16.
Echinococci, from an Acepha- }
locyst in the Liver. } DR. BEITH.
17.
Morbid Deposit of a doubtful }
character in the substance } DR. OGLE.
of the Liver. }
- Report on this Specimen. DR. H. JONES.
18.
Fibrinous Deposit in substance }
of the Liver and Spleen. } DR. OGLE.

19.

Abscess of the Liver, opening
into the Right Pleura and
Lung. } DR. BEITH.

20.

Intestinal Obstruction, of twelve
days' duration, from Stric-
ture of the Ascending Colon :
with Operation for Inguinal
Hernia, supposed to be
Strangulated. } MR. SHAW.

21.

Double Congenital Hernia, in
which the cavity of the Left
Tunica Vaginalis was divided
into two unequal portions by
an Adventitious Membrane. } MR. NATHANIEL WARD.

22.

Internal Strangulation of a por-
tion of the Small Intestine by
a strong Fibrous Band con-
nected with the Mesentery. } MR. NATHANIEL WARD.

23.

Dysentery with extensive
Sloughing and Ulceration of
the Large Intestines. } DR. BALY.

24.

Perforation of the Intestine in
a Case of Typhoid Fever. } DR. R. QUAIN, for DR. MERYON.

25.

Chronic Inflammation, and
thickening of the Cæcum
and lower part of the Ilium,
with Ulceration of the
Mucous Membrane, produced
by the lodgment of Gall
Stones. } MR. NATHANIEL WARD, for
MR. D. HOVELL.

26.

Diverticulum from the lower
portion of the Ilium. } DR. LIONEL BEALE.

27.
Cancer of the Cæcum. DR. LIONEL BEALE.
28.
A portion of the Rectum which, }
having protruded, had been } DR. BEITH, for MR. DICKSON.
cut off.
29.
Case of Diseased Rectum, in }
which an Artificial Anus was } MR. HOLTHOUSE.
made in the Left Loin.
30.
A remarkable Cyst in the }
Omentum. } DR. W. T. GAIRDNER.
31.
A large Cyst occupying the }
cavity of the Pelvis, and con- } DR. OGLE.
taining great numbers of }
Acephalocysts.

DISEASES, ETC., OF THE URINARY AND GENERATIVE ORGANS.

1.
Stone in the Left Kidney. MR. COULSON.
2.
Serous Cysts in the Kidney, }
with some Observations on } DR. BENCE JONES.
the Fluid Contents.
- Report on this Specimen. DR. BRISTOWE.
3.
Two Kidneys containing Serous }
Cysts. } DR. BENCE JONES.
- Report on these Specimens. DR. BRINTON and DR. BRISTOWE.
4.
An example of a Single Kidney }
being found in the Body. } DR. OGLE.
5.
Two Specimens of Cystic Oxide }
Calculi. } DR. RISDON BENNETT.

6.
Examination of some Gelatinous-looking Matter taken from a number of Cysts in a Kidney. } DR. BENGE JONES.
7.
Morbid Deposits of indistinct character in the Kidney. } DR. OGLE.
Report on this Specimen. MR. TOYNBEE.
8.
Great Enlargement of the Middle Lobe of the Prostate Gland, with much increased size of the Lateral Lobes of the organ. } DR. BEITH.
9.
Calculi in the Bladder and Ureter. MR. GAY for MR. WEBBER.
10.
Dysmenorrheal False Membrane. DR. HANDFIELD JONES.
11.
Membranous Menstruation. DR. TYLER SMITH.
12.
Rupture of the Uterus, complicated with a Hand Presentation. } DR. J. H. BLACK.
13.
Fatty Degeneration of the Uterus after Parturition. } DR. BRISTOWE, for MR. RAINEY.
14.
Deposit of Tubercle in the Uterus, Fallopian Tubes, and Peritoneum. } DR. BRISTOWE.
Report on this Specimen. DR. WEST and DR. BRINTON.
15.
Cholesteatomatous and Cystic Tumor of the Ovary. } MR. WILLIAM ADAMS.
16.
Malignant Disease of a Cystic Ovary—of the Liver and Peritoneum. } DR. BRISTOWE.

17.

Cancer of the Ovaries, Stomach, Liver and Peritoneum.	}	DR. BRISTOWE.
--	---	---------------

18.

A Fibrous Tumour in the Uterus ; and Diseased Kid- neys.	}	DR. OGIER WARD.
--	---	-----------------

DISEASES OF THE OSSEOUS SYSTEM.

1.

Great Enlargement of the Head, occasioned by a Mor- bid Growth from the Cranial Bones.	}	MR. STANLEY.
---	---	--------------

Report on this Specimen.	}	DR. W. JENNER.
--------------------------	---	----------------

2.

Three Cases of Fracture of the Spine, unattended with Para- lysis.	}	MR. SHAW.
--	---	-----------

3.

Necrosis of the Lower Jaw ; and Exfoliation of the Alveolar Process.	}	MR. PILCHER.
--	---	--------------

4.

Disease of the Lower Jaw.	}	MR. NATHANIEL WARD.
---------------------------	---	---------------------

5.

Necrosis of a portion of the Head and Neck of the Thigh-bone.	}	MR. SOLLY.
---	---	------------

6.

Extra-capsular Fracture of the Neck of the Femur, com- plicated with Fracture of the Trochanter.	}	MR. NATHANIEL WARD.
---	---	---------------------

7.

Case of Diseased Hip-joint, in which Excision of the Head of the Femur had been per- formed.	}	MR. CÆSAR HAWKINS.
---	---	--------------------

8.

Two cases of complete Osseous }
 Ankylosis of the Hip-joint. } MR. CÆSAR HAWKINS.

9.

Necrosis of the fractured ends }
 of the Tibia.—Separation }
 of the Exfoliation of the }
 Lower Portion (cut off from }
 its supply from the Nu- }
 tritious Artery), thirteen }
 months later than the Ne- }
 crosis from the Upper Por- }
 tion. } MR. N. WARD, for MR. CURLING.

10.

Rupture of the Uniting Liga- }
 ment, after Fracture of the }
 Patella. } MR. SHAW.

11.

Necrosis of the Tibia—Ampu- }
 tation. } MR. AVERY.

12.

A Congenital Stump—Ampu- }
 tation below the knee. } MR. AVERY.

DISEASES OF THE EAR.

1.

Congenital Malformation of the }
 External Ear and Meatus on }
 each side. } MR. TOYNBEE.

2.

Calcareous Matter in the Cavity }
 of the Vestibule. } MR. TOYNBEE.

3.

Examination of the Ears of a }
 Deaf and Dumb Child, in }
 which a portion of one of }
 the membranous semicircular }
 Canals was distended with }
 Otoconia. } MR. TOYNBEE.

4.
Disease of the Base of the
Brain, extending from the
Tympanum through the
Labyrinth. MR. TOYNBEE.

5.
Necrosis of the Squamous por-
tion of the Temporal Bone,
originating in Catarrhal In-
flammation of the External
Meatus. MR. TOYNBEE.

6.
Cholesterine in the Mastoid
Cells. } MR. TOYNBEE.

MISCELLANEOUS SPECIMENS, TUMORS, CLUB FOOT, ETC.

1.
Crystals formed on the Surface
of the Body, previously to
death, by Cholera. } MR. OBRÉ.

2.
Specimens of the Guinea Worm. DR. BEITH, for MR. DICKSON.

3.
Two Specimens of Fluid Fibrin. MR. HENRY LEE.

4.
Cancer, with rapid Destruction
of the Breast and adjacent
parts. } MR. GAY.

5.
Portions of Different Bones
found in a Congenital
Tumor. } MR. CHARLES HAWKINS.

6.
Encephaloid Tumor of the
Fore-arm, involving the deep
Flexor Tendons. } MR. NATHANIEL WARD.

7.

A Tumor of Peculiar Structure, taken from the Outer and Middle Part of the Leg. } MR. GAY.

8.

A Tumor removed from the Thigh. } DR. BRISTOWE.

9.

A Cutaneous Fatty Tumour. MR. BROOKE.

10.

Double Talipes Varus, and Spina Bifida in a Fœtus at Birth.—Also the Bones of the Foot, from an Adult affected with Congenital Talipes Varus. MR. WILLIAM ADAMS.

11.

Case of Curious Deformity of the Lower Extremity, from Arrest of Development.—Deformity of the Upper Extremity also. MR. LONSDALE.

12.

Three Specimens illustrative of the Condition of the Muscles, Bones, &c., in different forms of non-congenital Club-foot. MR. WILLIAM ADAMS.

The following Specimens were also presented to the Society :—

1. Fibrous Tumour of the Gum. MR. MITCHELL HENRY.
2. Ulcer of the Stomach. DR. C. J. HARE.
3. Two Cases of Extra Capsular Fracture of the Neck of the Femur. } MR. COULSON.

- | | | |
|--|---|---|
| 4. Epithelial Cancer of the
Little Toe. | } | MR. COULSON. |
| 5. State of the Bladder in a
Fatal Case of Lithotritry. | } | MR. COULSON. |
| 6. Malignant Disease of the
Œsophagus, with Pericarditis. | } | DR. SIBSON. |
| 7. Vascular Cyst in the Kidney. | | DR. SIBSON. |
| 8. Fatty Kidney connected with
Peritonitis. | } | DR. SIBSON. |
| 9. Tranposition of the Ven-
tricles of the Heart. | } | MR. PARTRIDGE. |
| 10. Enchondroma of the Hand. | } | MR. POLLOCK, for MR. CLEMENT,
of Shrewsbury. |

* * *The descriptions of these Specimens, with one exception, have not been communicated to the Secretaries.*

REPORT.

SESSION 1851—52.

DISEASES, &c., OF THE NERVOUS SYSTEM.

1.—*Diamond-shaped Head from Compression at Birth.*

THE child, aged seventeen months, whose head had been distorted by compression at birth, was a tenth child, a female, born after a natural labour of six hours' duration, on May 5th, 1850. At this time the head was compressed laterally, and elongated upwards and backwards, the right parietal bone rising in a ridge over the left along the sagittal suture. May 20th.—The head remains in the same state. The child is very easily startled at the least noise, and is "convulsed" and flatulent. It looks healthy, but is very small. September 21st.—Latterly the child has begun to thrive, having for a long time scarcely appeared to grow at all. It is much less troubled with flatulence, but it starts and screams occasionally, without any apparent cause, unless it be from dentition, as the teeth are beginning to distend the gums. The head is much distorted, though the right parietal bone no longer rises above the left. It is more deformed than the ordinary oblique-shaped head; for, besides the right side of the head being advanced before the left, it is very much flattened above the ear, where it is over-arched by the left side, giving the child a wry-necked appearance. The left side of the head projects backwards more than the right does forwards; and the whole right side appears smaller than the other. The point of the hairy scalp is over the right eye. The head subsequently improved very much in symmetry, and the child is now thriving, though still troubled with convulsive movements attended by screams.

Three crania from the museum at St. George's Hospital were exhibited, presenting the like deformity, the right side projecting before the left; this was also the case in all the crania and living instances Dr. Ogier Ward had met with, and was attributed by him to the left side of the head at birth being compressed against the sacrum, while the right side turned upon it just previous to its expulsion from the pelvis.

Dr. OGIER WARD, 21st of October, 1851.

Observations on this case by Dr. PEACOCK, tended to show that the deformity in question was due, in many cases, to the position in which children, being rickety, happen to be carried in the nurse's arms.

2.—*Encephaloid growth in connection with the Dura Mater, with portions of the Pelvic Bones and other Textures.*

The patient, aged thirty years, of a very unhealthy aspect, was confined about a year and a half before death. Since her confinement she has been progressively invalided by pain in the abdomen, left groin, and hip, the left leg having become gradually paralysed. She also had great pain in voiding urine, but no other symptom seemed to have been experienced before her admission into St. George's Hospital. On admission she was in a very depressed state, and with the before-mentioned symptoms, exhibited those of inflammation of the mucous membrane of the bladder. On examination, *per vaginam*, a distinct tumor within the pelvic cavity was felt through the parietes of the vagina, but it did not appear to be at all connected with the uterus, neither was it in a position to interfere mechanically with the bladder itself. There was observed, in addition, a soft fluctuating tumor at the back of the right side of the head, which increased much during her stay in the hospital. She was treated by means of stimulants and narcotics in reference to the bladder symptoms, but sank about ten days after admission.

The Post-mortem examination showed that the tumor connected with the scalp contained a quantity of bloody purulent fluid

mixed with shreddy, broken-down particles of carcinomatous tissue. The corresponding cranial bones were deprived of pericranium, and slightly carious on their surface, and the occipital and parietal bones at this part, were slightly separated at their suture. On removing the calvaria, the bones were found to be very dense, thickened, and vascular, and to have a large mass of soft bloody substance, equal to an egg in size, connected with the inner surface, opposite the external tumor. This mass was in the act of making its way through the before-mentioned suture, and was of a decided encephaloid character. It was firmly connected with the dura mater covering the posterior part of the right cerebral hemisphere, the serous lining of which at this part also presented a small mass of a similar character, but having an even entire surface. The subjacent visceral arachnoid was, however, unaffected, as was also the brain as to structure, but the latter presented a considerable depression, caused by the morbid mass, and from the pressure, the right lateral ventricle was almost entirely destroyed. There was found, also, a small portion of soft encephaloid matter growing from the dura mater on the left side of the head, connected with the internal surface of the cranium; but it had not in any way penetrated the inner plate of the bone, or inwards towards the brain. Encephaloid masses were also found connected with the pleura, and in the substance of the pancreas and kidneys; in the pelvic cavity was a large mass, looking at first like diseased glands, but which was intimately connected with the anterior surface of the sacrum on the left side, and the contiguous ilium. It had also broken through the sacro-ischiatic synchondrosis, and was connected with the posterior surface of the sacrum on the left side, making its way also upwards among the deep muscles of the back to a slight extent.

This case seems to offer the following interesting points:—

1st. The fact that one portion of the diseased mass within the cranium was evidently a growth from the dura mater, and only affected the bone secondarily.

2nd. The freedom from any cerebral symptom enjoyed by the patient, even to the close of life; an argument in favour of the slowness of growth in this instance.

3rd. The affection of the lower extremity and of the bladder at a time when they might fairly have been considered as in connection with some results of parturition.

Dr. OGLE, 3rd of February, 1852.

3. *Hydrocephalic Head of a Male Child aged Four Months.*

The mother was delivered by Mr. Beale; and the labour was unimpeded. The frontal sinuses were at birth observed to be very open, but the head was not seen to enlarge inordinately till three weeks after. The child fed well, was as lively as others at that period of life, and never appeared to be blind; but the body and limbs did not grow properly, whereas the belly was tumid, and the bowels obstinately constipated. For a fortnight before death the head did not increase so rapidly; and on the day before death some difficulty in swallowing was observed. The child died in general convulsions.

The horizontal circumference of the head over the integuments, when last measured, was 27 inches. The parietal bones were much more expanded than the other bones of the head. At about two inches from the sagittal and coronal borders the ossification was apparently interrupted by intervals of membrane, not, however, sufficiently regular or connected to form complete Wormian bones; and what is remarkable the falx major was attached beneath to the border of the right bone, but was separated from the left by an inch and a half of membrane, apparently showing that the left side had been the more distended.

A portion of bone was developed on each side of the median line in the position of the falciform process of the frontal just above the root of the nose, quite unconnected with the orbital or vertical portions of that bone. The frontal protuberances were large and turned outwards. The frontal suture two inches across; anterior fontanelle, very large; squamous sutures separated to three quarters of an inch. The fluid was contained in the ventricles only, and amounted in quantity to 73 ounces. The convolutions were flattened and spread out, and not more than three-eighths of an inch thick over the upper part. The foramen of Monro was much enlarged, the corpus callosum stretching like a

bridge under the falx to which it was attached. The opening for the pons to pass beneath the tentorium was much larger than in the adult state, and the arachnoid of the cerebellum was raised, apparently by effusion beneath.

The brain was in too soft a state to admit of proper examination.

The effused fluid, when examined by the microscope with an object-glass of a quarter of an inch focal distance by Dr. Salter, was seen to consist of—

1st. A fluid holding suspended in it an abundant molecular base, exhibiting the phenomena of molecular motion, and evidently not fatty, like the molecular base of chyle, as it was not affected by ether.

2nd. A great number of cells, very like pus-cells, but more nearly resembling exudation-cells. They were all spherical, exactly alike, clear, bright, with three or four nuclei, and a smooth external surface.

3rd. Small spherical homogeneous cells about the $\frac{1}{3000}$ th of an inch in diameter. These were supposed to be of vegetable and *post-mortem* origin. Mr. JOHN WOOD, 2nd of March, 1852.

4. *Laceration of the Right Lateral Sinus, with extensive Extravasation of Blood between the Bone and the Dura Mater, the results of an Injury.*

The patient, a middle-aged man, was admitted into St. George's Hospital, at the latter end of August, with the following history:—At two in the afternoon, it appeared that he had fallen out of a cart and struck his head: this was followed by very slight symptoms, which soon passed off, and, after having taken a little brandy and water, he proceeded about his business, and drove six miles out of town. At six in the evening, however, whilst delivering his last parcel, he suddenly became quite insensible, and fell. He was seen by a medical man, who bled him: he was subsequently brought to the hospital, and, when admitted, presented well-marked symptoms of pressure on the brain. The various parts of the skull having been carefully examined, were found to present a natural appearance, but pressure on the right parietal,

just above the ear, and only on this spot, made the patient shrink, and the movements of the left arm appeared to be somewhat more sluggish than those of the right. The countenance was not in the least distorted. Mr. Prescott Hewett, thinking that the symptoms of compression might depend upon an extravasation of blood between the bone and the dura mater, produced by a fissure of the parietal, with laceration of the middle meningeal artery, determined upon making an incision down to that bone. The incision was carried across the two anterior thirds of the lower part of the parietal, but no fissure was detected, neither was there any single sign to show that the bone had been in any way injured. The patient continued much in the same state, and died about two hours and a half after his admission. At the *post-mortem* examination, a fissure was found in the right parietal, but at the most posterior and inferior part of the bone. Traced out, this fissure passed downwards, and divided into two branches, one of which, crossing the petrous and mastoid portions of the temporal, terminated in the posterior fossa of the skull. The lateral sinus, just as it turns under the petrous part of the temporal, presented an extensive laceration in its outer wall, which had given rise to an immense extravasation of blood between the bone and the dura mater, and a corresponding depression of the brain. The other branch of the fissure terminated in the middle fossa of the skull. The brain itself was healthy in structure, save in one or two spots, where it was slightly bruised.

Mr. PRESCOTT HEWETT, 21st of October, 1851.

5.—*Case of Fracture of the Skull, with injury to the Brain, complicated with Diseased Kidney.*

II. D., aged thirty, a fine healthy-looking man, was brought into the Royal Free Hospital, on the 8th January, having had the left parietal bone fractured by a brick, which fell on him from a height of fifty feet. Several pieces of bone were driven into the brain, and some portion of the substance escaped through the wound. When brought to the hospital, he was not completely insensible; he became gradually so, and about twenty-four hours before his death, his mental powers quite failed

him. He had an epileptic fit one hour after the accident, and another on the third day. His pupils became dilated on the day after the accident, the right more so than the left, and continued so throughout his illness : still they were not at any time quite insensible to the stimulus of light. His right arm and leg became slightly rigid on the third day, and completely palsied on the fourth, the day of his death. After the epileptic fit on the third day, the left side of the face became palsied ; whilst the right, with the arm on the same side, became convulsed ; the convulsions of the face continuing, with occasional intermissions of a few minutes' repose, to the last. Previous to death, the fæces and urine passed involuntarily, and his breathing became purely abdominal.

This man, six months before his death, after drinking an unusual quantity of beer, had been seized with pain in his loins. The urine he passed was mingled with blood on several occasions, and was thick and dark-coloured for several days after each occasion. After a few weeks these symptoms passed away, and he regained his usual health.

Post mortem examination.—The left hemisphere was lacerated to the depth of about an inch just above the lateral ventricle ; but the corpus striatum, optic thalami, and other parts of the brain were uninjured. Some arachnitis existed in the neighbourhood of the wound ; the dura mater was lacerated, and sloughy. The lungs and bronchial mucous membrane were intensely congested. The right kidney was found smaller than natural, and partly converted into a cyst by dilatation of the calices and pelvis, with almost complete absorption of the tubular and secreting tissue. The ureter was small but unobstructed, and its tissue appeared partially atrophied. The kidney was distended with urine, which was only very slightly acid (evidently owing to its having been retained for some time within this organ), and albuminous. When the kidney undergoes this change it is usually enlarged, and there is obstruction found in some part of the ureter ; here the reverse was the case. The heart was small ; the left ventricle, with its columnæ carneæ, very much hypertrophied, and the chordæ tendineæ unusually firm and strong. The aorta was contracted, and two of its valves had been rendered partly ineffective

by adhesion of their free edges to each other, to within a very small distance of the corpora Arantii.

Mr. GAY, 20th of January, 1852.

6.—*Two cases of Fracture of the Temporal Bone, with injury to the Brain, attended with Hæmorrhage and Serous Discharge from the Ear.*

In the first case, a man of middle age was admitted into St. George's Hospital, after having fallen, as it was supposed, from his horse. There was some ecchymosis of the right eyelids, without evidence of any blow on the part; the patient could at first just mention his name, but soon became incapable of answering any question, though he muttered some unintelligible words, and struggled to cover himself with the bed-clothes, if he were disturbed; he passed his water and motions unconsciously, but was sensible to touch, and moved all his limbs instinctively; he had no palsy of the face, and the muscles of the arms—especially the left—were in a permanent state of spasm, when not otherwise called into action; the pulse was under 60, and laboured; the respiration partially stertorous, and the pupils of both eyes contracted, and insensible to light.

There was, from these symptoms, evident laceration of the brain, not so deep as the corpora striata or thalami, as there was not any paralysis; there was also internal hæmorrhage, causing moderate compression, and probably a fracture of the base of the skull, not across the tympanum, as there was no blood or other discharge from the ear, but perhaps anterior to the petrous portion, so as to allow blood to be effused into the orbit and eyelids.

To prevent further hæmorrhage, he was bled from the arm, which improved the breathing for a time, but the symptoms of irritation and compression continued. On the third day, some ptosis of the right eyelid was observed; he became very restless, and was with difficulty kept in bed; then he became more quiet, and died on the 7th March, nearly sixty hours after the injury.

On removing the integuments, great ecchymosis was found in the substance of the right temporal muscle, arising from a frac-

ture of the right temporal fossa. On removing the calvaria, a good deal of blood was found between the dura mater and the bone on the right side, and a clot of considerable size was found within the dura mater, covering the middle of the cerebrum, and extending towards the base of the brain, where there was a good deal—perhaps two or three ounces—of blood. The bottoms of both middle lobes were lacerated to the depth of an inch, and softened for some distance, and there were very many small bruises and spots of extravasated blood in each lobe of both hemispheres, the largest of which was at the upper and back part of the posterior lobe of the left side, which was bruised to the depth of about a quarter of an inch. From the anterior inferior angle of the right parietal bone, a fracture passed downwards and forwards across the sphæmoid fissure, and thence through the lesser wing of the sphæmoid bone and body of that bone to the horizontal plate of the æthmoid bone; an additional small fracture passed backwards from this part to the sella Turcica. Some blood was found in the orbit, but not among the muscles, and the extravasation in the eyelids had proceeded from some blood passing from the temporal muscle, over the edge of the orbit.

The points of interest were, that the fracture of the temporal bone had ruptured a large branch of the middle meningeal artery, the blood not being extravasated between the bone and dura mater only, as is sometimes the case, or making its way through the ear, as is also sometimes seen, but having chiefly escaped through a rent of the dura mater, about half an inch long, into the cavity of the arachnoid.

A second point exhibited was some coagulated blood within the sheath of the optic nerve, showing how dilated pupil may sometimes be produced on one side from this local effusion, though in this particular instance its effects were not observed, as both pupils were in a contracted state, corresponding with the spasmodic condition of the muscles of the limbs, and depending like that on the lacerated state of the hemispheres.

In the second case, a man, forty years of age, while standing in an area, was supposed to have fallen on the back of his head on the stone pavement. He remembered nothing of the cause of his falling, but as he had had a fit of some kind six years before, and

a second three years ago, it was believed that he had been attacked with a similar seizure a third time. He was not observed for an hour, and remained insensible for five hours on Saturday week, the day of the accident; he was bled on the following day, and blistered on the next, and was admitted into St. George's Hospital on the Wednesday following, at which time he was perfectly sensible, complaining of much pain across the middle of his head, his countenance having an expression of distress, and he moved with slowness and tremor, and had a free discharge of transparent serum, tinged with blood, from his left ear, with a small scalp-wound on the top of the occipital bone. It was clear that there was a fracture of the left temporal bone, but there were no symptoms, as in the former case, showing whether the brain was injured, further than by the first concussion; there was only apparent a certain amount of inflammation of the brain, not of an acute character, however, as the pulse was soft and only 60, and the tongue was moist, and the skin cool, and the colour of the circulation in the face was rather dark.

These symptoms did not seem to warrant much depletion, but he had a dozen leeches, and was cupped on the following day, and was put on the use of calomel, at first with antimony, and subsequently, when he became more restless, with small quantities of opium; some relief was felt from this, but effusion was not prevented; he became, therefore, more restless and sleepless, and then partly delirious; on Friday he had convulsive twitchings of the face and shoulders, and at night became insensible; on Saturday his pulse quickened, a copious perspiration came on, and he died on the ninth day from the accident, early on March 14th.

The cavity of the arachnoid, on the right side, contained much turbid serum, with masses of recent yellow lymph, which could be lifted up with the forceps, and the whole upper surface of the hemisphere was covered with opake lymph beneath this membrane among the folds of the convolutions; on the left side, the subarachnoidean cellular tissue was equally covered with opake lymph, but no lymph was found in the cavity of the arachnoid membrane. At the base of the brain a good deal of the same thick lymph was found in the subarachnoidean

tissue about the pons Varolii and medulla oblongata, the optic nerves, and other inequalities, but not on the under surface of the central lobes. Both lobes of the cerebellum were bruised—especially the right—to the depth of a third of an inch with a thin layer of ecchymosis; the middle central lobes were superficially ecchymosed and bruised, and the under surface of the right anterior lobe was rather deeply torn. Just below where the scalp-wound was situated, a fracture began and extended from the occipito-parietal suture, on the right side, into the occipital foramen, a fragment of bone being there quite loose; another fracture commenced on the left side of the same foramen, and passed outwards to the temporal bone.

This case was especially interesting in reference to the copious discharge of serum, amounting to several ounces in the twenty-four hours, and continuing in the same quantity during the whole of the eight days that the patient survived, dropping continuously from the ear, but much increased in rapidity if he talked or moved; it was for the first two days after his admission tinged with red blood, and contained many recent blood-globules; on the day before he died it was slightly yellower, and the day of his death it was quite clear; and, although slightly yellow on the day before he died, it never contained any pus, as is often seen in such cases.

It is well known that such a discharge has given rise to some difference of opinion, the cavities of the labyrinth, or the serum of the venous sinuses having by some been supposed to be the source of the fluid, but the observations of M. Robert, and his experiments on living animals, have fully shown that it is the secretion of the arachnoid membrane discharged through a fracture of the temporal bone with laceration of the membrana tympani. Its passage outwards is easily understood, if the thin dura mater covering the roof of the tympanum be torn by the fracture, but in this particular case the dura mater was perfectly uninjured at this part, and, therefore, a careful dissection made by Mr. Hewett, of the exact course of the fracture of the temporal bone was very valuable, as showing that the course of the nerves at the bottom of the meatus auditorius internus was the part where the dura mater had been injured, so as to afford an exit for

the escape of the serum of the cranial cavity. The exact course of the fracture from the left side of the foramen magnum, skirted the inner opening of the posterior condyloid foramen at the distance of about two lines from its outer margin; then passing across the lower portion of the groove for the inferior petrosal sinus, and slightly wounding the lining of the sinus, a clot of blood being left in the rent; the fracture then passed across the posterior surface of the petrous part, about half an inch to the outer side of the internal auditory foramen, crossing the superior petrosal sinus, without wounding its parietes; it descended first forwards for about half an inch, and a little internal to the eminence of the superior semicircular canal, and then passed abruptly inwards and forwards along the outer boundary of the depression for the carotid artery; it was then traced to the under surface of the petrous portion into the posterior part of the glenoid cavity, close to, but not into the Glasserian fissure, turning so as to include an oval portion of bone. Corresponding with this line of fracture, the anterior wall of the commencement of the internal jugular vein just below the bony exit was lacerated to the extent of about a quarter of an inch with a small coagulum in it. On separating the edges of the fracture of the petrous portion into the tympanum, a small coagulum was seen just where the nerve passed from the auditory foramen, and where the fracture communicated with the cavity of the arachnoid in the bottom of the foramen. The membrana tympani was lacerated in two places, so as to afford an external exit for the fluid, after it had passed through the fracture.

Mr. CÆSAR HAWKINS, 16th of March, 1852.

7.—*Abscess of the Middle and Posterior Lobes of the left Hemisphere of the Brain, associated with Rheumatic Symptoms.*

A female, aged 17, of a lymphatic temperament and anæmic constitution who had suffered from dysmenorrhœa, complained of headache on the 11th October, 1851, accompanied by stiff neck, tenderness of the cervical muscles, and undefined febrile symptoms, supposed to be those of incipient typhus. The symptoms continued to increase, notwithstanding the operation of a purga-

tive, followed by some diaphoretic and diuretic draughts. On the 17th she had a cold fit, followed by copious perspiration. On the 18th Dr. Bird saw her, with Mr. Fennell, and found her lying on the right side, complaining of extreme tenderness of the epigastrium, particularly when pressure was made upwards against the diaphragm; also tenderness of the præcordial interspaces, much neuralgic tenderness and stiffness of the muscles of the left arm and leg, and of similar tenderness of the right side, but in a minor degree. There was epigastric pulsation, also vomiting and gastric irritability; short, quick respiration, and wandering delirium. The patient retained consciousness, and gave rational answers when roused. She had extreme tenderness at the nape of the neck, extending over the whole of the epicranial region, with much headache, and some degree of sore throat. She lay with her eyes quite open, and in a semi-comatose state, the pupils unnaturally dilated, and the countenance pale and languid; pulse 100, full but soft; temperature of the skin not greatly increased. Having taken some mercury and chalk, with James' powder and opium, followed next morning by a purgative draught containing vinum colchici, she had one copious dark stool; a turpentine and pyroligneous acid liniment was applied to the epigastrium. She felt somewhat easier on the 19th. She was then cupped on the nape of the neck to six ounces, with marked relief. On examining the heart, there was heard a harsh, irregular, endocardial, systolic murmur on the right side, which was audible also at the epigastrium. On the 20th, there was less muscular tenderness of both sides; and on this day a large patch of erythema papulatum situated on the right hip and thigh, was first pointed out to Dr. Bird. The delirium continued to increase, followed by deep coma on the 22nd: and death took place on the morning of the 23rd.

Examination after Death.—The examination was made by Mr. Bullock, of St. Mary's Hospital. The body was rather thin and pallid.

Head.—The pia mater presented, on the upper part, much dark venous congestion, unaccompanied by any serous effusion under the arachnoid; but at the base of the left hemisphere it presented a state of bright red vascularity, as seen in active

inflammation of this membrane. There was no abnormal redness of the substance of the cerebrum, as far down as the corpus callosum ; but, on cutting into the left ventricle, a gush of yellow purulent matter, mixed with clear flakes of lymph, to the amount of about 3 ounces took place. There was an effusion of about 1 ounce of clear serum in the right ventricle. On removing the left hemisphere of the cerebrum, the abscess was laid open from the base. It was found occupying the ventricle, its cornu, and both the middle and posterior lobes of the hemisphere. It was partly lined by a soft flocculent vascular membrane, presenting somewhat the villous vascular appearance of a mucous surface, and composed seemingly of the ventricular lining membrane. The cerebral substance in the neighbourhood was softened, but was not abnormally vascular. The pia mater, covering the inferior surface of the middle and posterior lobes, had a bright red vascular appearance.

Chest.—The lungs were healthy. The pericardium presented no signs of inflammation. In the right auricle and ventricle there were several firm carnified coagula ; those in the ventricle adhering firmly to the cordæ tendineæ. There was no valvular disease on either side.

Abdomen.—The mucous coat of the stomach on its great curvature, from the cardiac to the pyloric orifice, was uniformly red and vascular. The liver was spread over a somewhat larger space than usual. The peritoneum and intestines presented appearances of venous congestion ; as did the right kidney, which was examined, and found to be natural in structure. The uterus was small, but normal.

Morgagni, from Valsalva, describes a somewhat similar case of a woman, in whom the ventricle of the left hemisphere contained a large quantity of pus, without any discoverable lesion of the cerebral substance. The menstrual discharges had greatly decreased, and a tumor arose on the left leg, for which the limb was amputated. The healing of the stump proved tedious, and, after the completion of the cicatrization, the characters which the case assumed were fever, apoplectic symptoms, delirium, convulsions, and palsy of the right side. In the present instance, the dysmenorrhœa, eruption of erythema papulatum, and

fibrinous coagula in the heart of some standing, are all so many proofs warranting the inference that the patient was of a rheumatic diathesis, and owed many of the symptoms of her last illness to a rheumatic condition of the blood, which was not, Dr. Bird regretted to say, subjected to a chemical examination. The connection between the chronic cardiac disease, which was of an obstructive kind, and the structural change in the cerebrum, must not be overlooked; for, according to the statement of the patient's mother, she had been ailing for some short time previously to the illness which terminated her existence. In how far the neuralgic rheumatism was the result of diseased irritation propagated from the central nervous organ, is a question of interest which Dr. Bird did not try to determine.

Dr. JAMES BIRD, *4th of November, 1851.*

8. *Crimson or Hæmatoid Crystals, and Calcification of the Minute Arteries of the Cerebrum.*

The rhomboidal crystals under the microscope were obtained, Dr. Jenner stated, from what appeared to be an old clot in the right corpus striatum and white matter adjacent, of a woman about sixty years of age. Although these bodies were first figured by Sir Everard Home, they were not fully described in detail till Virchow published his memoir on Morbid Pigment in the first volume of his "Archives für Anat. Pathol." Under the microscope might also be seen much orange-coloured amorphous, and more or less granular matter, in which the crimson crystals lay. Both the orange-coloured granules, and the red crystals are, Virchow states, modifications of hæmosin, and therefore he terms the latter hæmatoid crystals. Independent of the interest which their appearance might excite, they are probably of some practical importance, for it would seem, that, whether really, as Virchow states, a crystalline form of hæmosin or not, they are never found unless preceded by stasis of blood,—and that several days, perhaps weeks, are required for their formation. The earliest period at which Virchow knew them to be found was seventeen days. This was in the case of an individual who had received an injury whereby extravasation of blood was

produced. With reference to the case from which the crystals under the microscope were obtained, it was a matter of great interest to determine the age of the clot. The woman had had no paralysis of the left arm or leg, and very trifling loss of power in the muscles of the left side of the face. She died from apoplexy, with right hemiplegia, of two days' duration. An evidently recent clot occupied the left corpus striatum and optic thalamus, and a clot of considerable size, having a somewhat orange colour, and containing the crimson crystals, a part of the left corpus striatum and adjacent white substance. Now, what was the age of the clot on the right side? Was this woman walking about without any signs of paralysis of the left arm or leg, with a large clot in the right corpus striatum and white matter adjacent? Many of the minute arteries in the corpora striata, and a few in the white matter of both hemispheres were, in the same subject, the seat of a deposit of calcareous matter. The deposit was in some cases limited to the middle coat, and in several the calcareous matter existed in the form of minute granules, giving only a clouded appearance to the coat. Hydrochloric acid dissolved the calcareous matter,—giving off bubbles of gas, probably carbonic acid. The coats of the arteries, after the action of the acid, looked perfectly healthy. The walls of a few of the capillaries were studded with fat. Some of these calcified, and also many of the apparently healthy minute vessels of the white substance of the hemispheres were filled with orange-coloured granules, no blood discs being perceptible among them. Dr. Jenner thought these granules had been formed during life, as a consequence of congestion, from which the patient had been supposed to suffer, and that their presence must seriously have interfered with the circulation through, and consequently with the function of, the cerebrum. He adverted to a case that lately fell under his observation, in which the external coat of the minute arteries of the brain was greatly thickened by fibrous tissue, and to the effect on the cerebral function which this condition might have produced.

Dr. W. JENNER, *2nd of December, 1851.*

Dr. BALY referred to a paper on the anatomy of thrombus by Sir E. Home, in which these bodies are spoken of as being found

after a certain period ; so long a period, indeed, that he (Dr. Baly) thought they must, in Dr. Jenner's case, be referred to the earlier date.

9.—*General Softening of the Brain, with Abscess in the Left Cerebral Hemisphere, in connexion with Caries of the Temporal Bone.*

There was found a carious state of the petrous element of the left temporal bone, a portion of the anterior surface being entirely destroyed ; and there was also great vascularity, with porosity and softening of the part entering into the formation of the lateral sinus, as well as of the mastoid portion externally, and of the parietes of the external auditory canal. The membrana tympani was destroyed, and purulent fluid existed in the inner ear. There was considerable adhesion of the dura mater to the calvaria generally, and, corresponding with the ulcerated petrous portion, this membrane was also ulcerated, the margins of the ulcerated part being thickened and dark, and firmly adherent to the bone. The vessels of the pia mater were, for the most part, so congested, as to give at first the idea that extravasation had occurred. On examining the brain, it was found to be generally softened, but more especially as regards the left hemisphere and the parietes of the lateral ventricles, which contained much purulent fluid, and had their septum broken down. In the anterior and inferior part of the left softened hemisphere was an abscess about the size of a small orange, with definite and moderately firm parietes, containing healthy-looking pus. This had doubtless been in close relation with the diseased bone, as, on insinuating the fingers between it and the bone, the abscess burst, and much purulent fluid welled out into the cranial cavity. The cerebellum was healthy, as well as the medulla oblongata. The patient from whom the specimen was taken was admitted into St. George's Hospital, suffering from bronchitic and rheumatic symptoms, as well as from a slight discharge from the ear. He was made an out-patient in about four weeks' time, simply suffering from the discharge. He had not been out of the house above twenty-four hours when he had great pain "all over the body," and fell down in a "fit." He was insensible for several hours, and was re-

admitted as an in-patient in a partly unconscious condition. He became very sleepy, and incoherent in his expressions. His pulse was very feeble, and he gradually lost his intellectual powers, but never became delirious nor complained of pain. He sank gradually, and, in about eight days after the "fit," he died in a semi-comatose condition. No indications of a general scrofulous or other specific diathesis were observed.

Dr. OGLE, 20th of January, 1852.

10.—*Red and White Softening of the Right Hemisphere of the Brain.*

E. B., aged forty, was admitted into St. Mary's Hospital, on the 8th of December, 1851, affected with paralysis of the left arm and leg, with which she had been attacked twenty-four hours previously. She was perfectly sensible, and able to give a good account of herself, her speech being quite unaffected. She stated that she had always been delicate, and subject to headache; that two years before, the catamenia suddenly ceased soon after washing her feet; that for about two years she had suffered from headache, affecting chiefly the right side of the head; and that during the last two or three months the pain on the right side of the head was more violent. Her husband, to whom she had been married upwards of a year, states, that she had, during that time, suffered from headache affecting the right side, and with increased severity during the last four months. She had often been drowsy. Her eyesight, particularly that of the right eye, was affected; she was usually wide of the mark in attempting to thread a needle. She vomited at the commencement of the paralytic seizure. When admitted she was pallid, and anæmic-looking. The left arm was quite powerless, and the left leg semi-paralysed. Sensation was perfect. There was no facial paralysis. There was little perceptible change during the 9th, when she stated that she felt better, and that she had more power in the leg. On the 10th she protruded the tongue towards the affected side, the right side of the tongue being more rigid than the left. She became drowsy and torpid on the 11th, answering questions, when roused, in a slow, hesitating way. She

yawned occasionally; could not be induced to take her breakfast, and passed her urine and fæces in bed. Her evacuations were copious and bilious. The larynx was drawn somewhat towards the left side. The left sterno-cleido-mastoid muscle was rigid. The breathing was irregular, slow, and moaning. During inspiration she dilated both nostrils, and during expiration she occasionally puffed. The left masseter quivered; the left arm and leg lay powerless. When the left sole was tickled, the leg was drawn slightly upwards. The pupils were dilated and sluggish; the right eye was turned upwards. On the 12th she lay as if unconscious: when spoken to sharply she opened her eyes, but did not attempt to speak. The respiration was occasionally stertorous and puffing, occasionally moaning. The left sterno-mastoid was relaxed: the right arm somewhat rigid; the mouth firmly closed. When the urine was drawn off she moved her right arm and leg, as if semi-conscious. On the 13th, respiration was irregular, with constant moaning and occasional stertor. The extremities were rigid; the face was flushed; the pulsation of the right carotid was strong and visible, while that of the left was feeble. At half past three p.m., she lay quite unconscious, and incapable of being roused, the right pupil being dilated, the left of medium size. The right nostril was permanently fuller than the left, which did not act in the least. The left angle of the mouth was lower than the right, the puffing expiration being usually limited to the left side of the mouth. The left sterno-mastoid was relaxed and did not act during inspiration. The right sterno-mastoid was rigid, and acted freely during inspiration. The larynx was in a central position. There was general moderate stiffness of the limbs. The left arm was moderately rigid, especially the biceps and flexor muscles—the fingers being semi-bent, while the triceps and extensors were relaxed. Reflex movements of the leg were excited by tickling the sole. The pulse was very irregular—12 in the first ten seconds, and 22 during the succeeding ten seconds. This irregularity corresponded with the very irregular respirations, which were sometimes seven, and sometimes thirteen, in twenty-five seconds. The inspirations were deep; each expiration was accompanied by a groan, which was stronger and more struggling when the respi-

ration and the pulse were simultaneously quickened. The movements of breathing were exactly equal on both sides, varying everywhere, according to the depth of the inspiration, from 6 to 20-100ths of an inch. The abdominal muscles were powerfully contracted during each expiration, when the rigid walls on each side protruded outwards. Hence, during each inspiration, although in front the abdominal walls advanced freely about a quarter of an inch, yet at the sides they fell in, owing to the relaxation during inspiration of the previously rigid abdominal muscles. The right and left scalenus acted during inspiration with equal power. At 4.50 P.M., her pulse was small and weak, and the breathing noisy, from the excessive quantity of adhesive saliva and mucus which filled the mouth. The respirations became less and less frequent, and she died at 5 P.M.

Post-mortem examination, made forty-six hours after death.—The body is muscular and well formed. There is congestion of the right side of the head under the scalp. The calvaria is very thick anteriorly. The vessels over the left hemisphere are distended with blood. Under pressure, the whole left hemisphere is firm; but the right, which is not congested, is soft, pulpy, and yielding over its anterior three-fourths. The anterior three-fourths, and the superior two-thirds of the right hemisphere are throughout affected to a greater or less degree with red, fawn-coloured, and white softening. Just above the level of the corpus callosum in the medullary structure there is an oblong patch of softening, of a dusky red colour, nearly two inches in length, and three-quarters of an inch in breadth. There is a white layer of medullary structure interposed between the grey matter of the convolutions and the patch in question, the outline of which is projected, as it were, in points between the curves of grey matter covering each convolution. The grey matter of the anterior and lateral convolutions is throughout more or less affected, being everywhere softened, and in some parts pale, in others of a dusky violet or red, especially at the recesses of the convolutions. One large deep convolution at the posterior and lateral part of the brain is affected to an unusual degree. It is soft, and streaked throughout of a dark dusky-red, and is deepest in hue at the surface. This convolution forms a red mass of about the size of

an oblong walnut. In the medullary structure, which is throughout soft, but entire, there are below the large oblong patch described above, several smaller patches of red softening—one of them is of a reddish pink colour, irregular, of the size of a pea, in the middle of the anterior lobe. Another reddish patch, of the size of an almond, is seated just outside the posterior part of the corpus striatum. Behind this is a fawn-coloured spot of the size of a sixpence. Close to the anterior part of the corpus striatum there is in the medullary structure a ring of red softening, with a fawn-coloured centre, the size of a peppercorn. In the anterior portion of the corpus striatum there is a patch of red softening of the size of a pea. The greater part of the right corpus striatum, and the whole right thalamus, appear healthy. The left hemisphere is firm throughout, and the grey structure is unusually dark; but there is an exception in one of the lateral convolutions, the grey substance of which is markedly thin, firm, and pale. The whole of the base of the brain, the cerebellum, the pons, and the medulla, are firm, the grey matter being everywhere, both in the convolutions and the central masses, unusually dark. The left choroid plexus is more injected than the right. Under the microscope, the capillaries are congested, and the minute arteries ramifying through the posterior convolution affected with red softening are observed many of them to have their walls studded with minute fatty granules. Some of the vessels are universally thus degenerated; others only in patches; while others are quite free from all abnormal sign, being perfectly white and semi-translucent. Some fatty granular corpuscles were mingled with varicose nerve-tubes, with large fat corpuscles, and with a few red amorphous masses. There is much frothy mucus in the bronchial tubes. All the cavities of the heart are empty. The liver is small and congested. The kidneys are lobulated and congested, their capsules, especially that of the left, being thickened. There are no other notable changes.

Dr. SIBSON, *20th of January, 1852.*

Dr. Handfield Jones gave the following description of the microscopic appearances observed by him in certain portions of the softened tissue. In the convolutions of the hemispheres there

were spots or patches of a red colour, portions of which under the microscope showed extreme congestion everywhere of the capillary plexus, and apparently small extravasations at various points. In the tissue around there were very numerous granule-cells of different sizes, and some large patches of the oily-looking matter which enters so largely into the constitution of the granule-cell; here and there the larger vessels (not so much the capillaries) were coated with the same matter.

Dr. Sieveking exhibited drawings of the affected cerebral arteries. Plate V. fig. 2, *a. b.*

11. *Hemiplegia—Epilepsy—Softening of a Corpus Striatum—Degeneration of the Minute Vessels.*

The following history of the case was supplied by Mr. Charles M'Shane, R.N. J. B., a sailor, aged fifty-three, was admitted into Greenwich Hospital on the 20th of May, 1844, having had shortly before an epileptic seizure. Nothing of his previous history could be ascertained, save that he had been for twelve years in the college, and that his left side was paralyzed. He was discharged from the hospital in a few days, and had no recurrence of the fit for more than twelve months. He had syphilis subsequently, but no fit till December 1850, when he had a single attack as before. During the following fifteen months he suffered more or less from bronchitic attacks, and had several epileptic seizures. He died on the 24th of March.

Post-mortem examination.—The right corpus striatum was found much softened and disorganized, presenting the usual characters of softening of this part, and only interesting for the remarkable distinctness with which fatty degeneration of the smaller vessels is seen. See Plate V. fig. 3, *a, b, c.*

Dr. R. QUAIN, 6th of April, 1852.

12. *Tumour in the Posterior Lobe of the right Hemisphere of the Brain.*

J. G., aged fifty-two, a carpenter, had generally enjoyed good health, but during the last four months, had suffered from frequent headache with numbness down the right arm,—not suffi-



cient, however, to prevent his following his employment. On the 2nd of April his daughter had an hysterical fit which frightened him and produced headache, principally at the back part of the head on the right side. The pain came on in paroxysms four or five times daily, but not at regular periods: it lasted from twenty to forty minutes. It was generally preceded by pain and numbness in the right hand and arm, which ascended to the head, and was so intense that it caused profuse perspiration. During the last two days of his life delirium came on in the attacks, but he was perfectly conscious between them. There was no previous paralysis, nor had he ever had any fit or blow. He had no sickness, his appetite was moderate, pulse 72, soft and feeble.

At first purgatives were employed, then leeches and counter-irritants: also calomel and sedatives, but nothing gave relief except ice applied to the part, and that only temporarily.

In this state he continued until the 16th, a period of fourteen days, when convulsions came on at 1 P.M., and he died at 6 P.M.

Post-mortem examination.—Twenty-four hours after death the sinuses were found very much gorged with blood. At the inferior portion of the posterior lobe on the right side in the substance of the brain was a tumor about the size of a pullet's egg of an ash colour, soft, embedded in the substance of, and approaching within a few lines of the surface.

J. C. LANGMORE, M.B. 20th of April, 1852.

Report on this Specimen.—"A section of the tumor showed it to be of solid consistence — soft but tough. The mass was somewhat more than an inch in diameter, bounded externally by an irregular outline. The central portion—about the size of a bean,—was of a yellow colour, closely resembling fibrin, infiltrated by serosity. External to this was a portion of greater extent of a brownish pink colour,—this resembled softened brain stained by the colouring matter of the blood. External to this coloured portion a layer of tissue, very solid and resisting, brain-like in colour, existed: it was about three lines in thickness. This external portion, when examined with the microscope, was found to be composed of strong nucleated fibres, disposed so as to form meshes, in which were enclosed numerous

cells, containing well marked nuclei and granules. The cells varied in size and form. Blood-vessels were also very distinctly seen.

"The coloured portions of the tumor were found to consist of delicate filaments, loosely disposed, and evidently formed by degeneration of the nucleated fibres found in the outer portions of the tumor, of nucleated cells similar to those observed above, of granules, of oil-globules, and of blood-vessels.

"The fibrinous-like centre was found to be composed almost entirely of oil-globules—granules—a few cells and filaments, and blood-vessels, the walls of which were studded with oily globules, and granules.

"It was thus evident, that the tumor had the characters generally assigned to so-called malignant tumors, and it was equally evident that the change going on in its substance and its vessels was that known as fatty degeneration.

"The extremely close resemblance which this tumor bore in its general appearance to an old apoplectic effusion was a remarkable fact well worth attention, and the result showed how very valuable is the aid of the microscope in determining the nature of these and of similar lesions.

Dr. R. QUAIN, *4th of May, 1852.*

13.—*Deposit of Fat within the Cervical portion of the Vertebral Canal.*

A child, when a year old, suffered from convulsions of so severe a character, that its life was considered in danger for many days; there was partial insensibility and a spasmodic action of the right side of the body. After recovery, the right arm and leg continued partially paralyzed; the hand could not be raised to the head, and was carried in an awkward position; the leg was used with a circular motion, the child being unable to advance it as in ordinary walking, and when an attempt was made to run, the limb was so powerless as to throw the child down; the degree of sensibility lost could not be ascertained; the faculties were unimpaired. At the age of three years, without any apparent cause, the convulsions returned, and killed the child

in three hours. The character of the last illness could not, with correctness, be ascertained.

The body, after death, was that of a remarkably robust child. A most careful examination was made, but no organic lesion or disease could be detected. The vessels of the arachnoid, pia mater, and the convolutions of the cerebrum, were slightly congested, those on the surface of the cerebellum more so. The ventricles contained a little fluid; the general structure of the brain was normal. The vascular congestion of the covering membranes increased as they were traced down the cervical canal as far as the beginning of the dorsal vertebræ, in which neighbourhood a network of engorged vessels surrounded a deposit of fat which lay external to the theca, and between it and the bodies of the last cervical and first dorsal vertebræ. The deposit attached to the spinal coverings by cellular tissue interlaced with minute vessels pressed on the cord. It was a mass of fat tissue, two and a half inches in length, the breadth of the canal, and about half an inch in thickness, composed of the ordinary spherical fat-cells, and it did not differ from fat usually met with in other situations, excepting that the cells seemed to contain fat in a more solid and granular state.

MR. OBRÉ, 6th of April, 1852.

DISEASES OF THE RESPIRATORY ORGANS.

1.—*A Diseased Larynx and Trachea seven days after the operation of Tracheotomy.*

THE mucous membrane of the larynx is in a state of ulceration; the vocal chords and the laryngeal pouches have disappeared, and the whole inner surface of the larynx is one large ulcer. The disease was of four months' duration. Latterly the patient could speak only in a whisper, and the difficulty of breathing was occasionally so great as to threaten immediate death. Tracheotomy gave great relief, but the patient died of erysipelatous inflammation of the subcutaneous cellular tissue. There was no disease of the lungs. Mr. Fergusson said that if the patient had not been threatened with suffocation on several

occasions, the operation would not have been performed ; but he thought, as such danger existed, that it was advisable to give him a chance of relief. Mr. FERGUSSON, 4th of November, 1851.

2.—*A Pharynx, Trachea, &c., showing a piece of Meat, a portion of which occupied the chink of the Glottis, causing Death by Suffocation.*

J. C., aged sixty-two, was brought into King's College Hospital, about half-past twelve o'clock on the night of April 2nd, 1852, quite dead. It was stated at the inquest, which was held on his body, that he was a beggar of very intemperate habits, who had suddenly fallen off his seat whilst making a voracious meal of *à la mode* beef-soup on the above evening ; when picked up, not more than a minute after he had been seen to fall, he was found to be quite dead. The body reached the hospital about ten minutes after the man had fallen from his seat. The surface generally, and the lips, were quite pale, the countenance calm, and the fists were not clenched.

The *post-mortem* examination took place on the following day. The body was above the ordinary stature, the nutrition good, and the limbs muscular and well-formed. Several marks of ecchymosis were observed about the skin of the head, neck and shoulders, and the skin of the ears and back of the head was of a dark purple colour, depending probably upon *post-mortem* changes. The lungs were congested, and their large vessels contained much dark fluid blood ; the large veins about the neck also contained black blood. The mucous membrane of the trachea and bronchi was reddened and velvety. The right cavities of the heart contained a small quantity of blood. A little lymph was deposited on one of the mitral valves. The brain, spinal cord, and other viscera, were quite healthy. Upon examining the pharynx, a large piece of beef was found completely covering the glottis, and wedged in between the cornua of the hyoid bone. From the inferior surface of this, another portion projected, and occupied the fissure of the glottis. The epiglottis was forced forwards upon the base of the tongue.

Dr. LIONEL BEALE, 18th of May, 1852.

3.—*Cancer of the Lungs, Pleura, Pericardium, Bronchial and other Glands.*

Dr. Quain gave the following history of the case, as obtained by Mr. Dickinson, of the Brompton Hospital. A. M. aged fifty years, a servant and a widow, the mother of two children, was admitted into the hospital under the care of Dr. Cursham, on October 13th. She had always lived well and enjoyed good health, save that seven or eight years before she had vomited considerable quantities of blood. This attack appears to have been connected with some derangement of the menstrual function. Her present illness came on seven months before her death, when she was attacked with cough and slight expectoration, with occasional pains in the chest. From this time she began to lose flesh, her appetite failed, and for the last two months she had had œdema of the legs, for which she had been subjected to acupuncture. On admission, she was pale and sallow, complaining of pain in the chest, troublesome cough, with scanty expectoration of a serous character, and of great dyspnœa, which prevented her from lying down at night. She had pain in the legs, which were œdematous, and, through an ulcer on each, discharged a considerable quantity of fluid. She slept badly, and had a bad appetite. Bowels were rather confined. Catamenia had ceased for the last two years. Hair black; eyes grey; fingers not clubbed; pulse 68; respirations 32. She felt very weak and low; was irritable, obstinate, and anything but communicative. On examining the chest, the right side was found to move but little. It was an inch and a half more in its circumference than the opposite. There existed great and universal dulness over the whole side. The vocal vibration was not felt, and respiration was not heard at the lower parts. Over the upper parts of this side, more especially behind in the supra and intra-scapular regions, there was a remarkably loud bronchial breathing with bronchophony. On the left side, there was dulness and a peculiar prolonged expiratory murmur. Over the heart there was heard, with the impulse, a rough, almost rasping sound. She continued to get worse; about ten days before her death the left arm became considerably swollen and œdematous, the

dyspnœa increased; and, after about a month's stay in the hospital, she gradually sank.

Post-mortem examination. — The body was not particularly emaciated. There was œdema of the left arm as high as the elbow, and of both legs as high as the hips; on the outer side of the left leg was a simple ulcer the size of a shilling; and on the right leg the cicatrix of another as large as a crown piece. The mammæ were atrophied. On opening the chest, the right lung was found adherent inferiorly to the wall of the cavity by a strong band. At the left side there were some slight old adhesions. In the right pleural cavities there were three pints of sero-sanguineous fluid; in the left, scarcely any. The costal pleura on either side was studded with small, flattened, hard laminae, varying in size from a split-pea to a sixpence. There were also a few calcareous particles the size of peas beneath the costal pleura. The right lung weighed 29 oz., was contracted in all its dimensions, and its surface irregularly studded with small, projecting, firm masses. On cutting into these, the whole lung was found to be closely studded, more particularly at the base, with similar masses. These varied in size from a small pea to that of a walnut, and were more distinctly bounded at their margins than are similar masses of tubercle. They felt solid and firm, but were easily crushed between the fingers, and were of a pinkish-white colour. The vessels and bronchi throughout the lung were remarkably patulous. The left lung weighed 19 oz., was about the natural volume, and contained several masses similar to those in the right lung, but smaller. There was grey hepatisation of a small portion at the base of this lung. The heart weighed 11 oz. Beneath the visceral pericardium, more particularly at the base, were observed a number of flattened, firm patches, in size from a flattened pinhead to a sixpence. These masses rendered the surface of the pericardium rough; and, on cutting into them, they were found to intrude but slightly on the muscular tissue. There was some thickening of the left and right auriculo-ventricular valves, more particularly of the left. Above the root of the lungs there was found a large mass of the like morbid matter. This mass extended to, included, and compressed the trachea, and still more so the arteria innominata and the

left vena innominata. The thoracic surface of the diaphragm presented several flattened masses on its surface, and a mass of the same matter as large as an egg occupied the lower part of the anterior mediastinum. The liver weighed 40 ounces, was healthy but congested; spleen small, weighed but $2\frac{1}{2}$ ounces; pancreas small. The kidneys weighed each $5\frac{1}{2}$ ounces, and were healthy but congested. The mucous membrane of the alimentary canal was much congested. The lumbar lymphatic glands contained matter similar to that described in the lungs. The uterus contained in its substance a small mass of deposit similar to that found in the lungs. Portions of the morbid matter from nearly all the situations in which it existed were examined with the microscope, and found to consist of cells and a stroma or basis. The fully-developed cells were about twice or thrice the size of blood-globules, generally spherical or oblong, and contained large, well-marked nuclei, granules, and oily particles. Some of these cells presented a peculiar appearance—a vacant space from which nuclei seemed to have escaped. The stroma was remarkable for the fineness of the fibres of which it was composed; these were irregularly disposed.

Dr. Quain remarked, that this case presented a good example of primary cancer of the thoracic organs. The morbid appearances were very characteristic, and it was well to direct attention to cases of this kind as aids to the diagnosis of these often obscure affections of the lungs.

Dr. R. QUAIN, 18th of November, 1851.

4. *Cancer of the Posterior Mediastinum.*

This specimen was removed by Dr. Jenner from a patient of Dr. Garrod's. During life, the man had suffered from symptoms indicating the existence of extensive effusion into the cavity of the left pleura. A trocar was introduced two days before death, for the purpose of affording temporary relief, but no fluid escaped. After death, the pleura was found divided into at least two compartments, by old false membranes. The topmost contained a large amount of limpid serosity: that into which the trocar had entered, a quantity of grumous fluid, too tenacious to pass through a trocar. Altogether the pleura contained about two quarts of

fluid. The growth exhibited occupied the posterior mediastinum, and passed into the root of the lung. The aorta at one place was surrounded by it, but the calibre of the vessel was not diminished. The left pulmonary artery was surrounded by cancerous matter, and its capacity greatly lessened; the pulmonary vein reduced to a mere chink; the lung was solid, greatly compressed, and so rotten, that it broke down with the greatest facility. The left bronchus was infiltrated with cancerous matter, and it was impervious. The growth offered a very good specimen of what Müller termed carcinoma reticulare. There was a transparent greyish base, on which might be seen opaque whitish dots and streaks. The consistence of the growth varied somewhat; towards the root of the lung it was much softer than elsewhere; the softer the growth, the greater the proportion of the opaque white portion. The greyish transparent part consisted of delicate fibres and large nucleated cells; the opaque white part of large corpuscles, filled with granules, chiefly fat. In a few of these granular cells a nucleus was dimly seen.

Dr. Jenner was unable to say what the physical signs were, as he had not seen the patient during life, or at all events only just before death.

Dr. W. JENNER, 20th of January, 1852.

5. *Encephaloid Tumour in the anterior Mediastinum.*

On the 27th November 1851, I was called to see Mrs. A.; her age was forty-three. A widow with three healthy children.

She stated that for twelve months previously she had suffered from gradually increasing difficulty of breathing, with occasional palpitation and slight cough. Nine months before she had had bleeding from the nose to a considerable extent, and for the last three months swelling of the upper half of the body and of the upper extremities had existed. The order of the parts so affected was first the throat, then the left arm and the right breast. About the same time distention of the superficial veins of the neck and chest attracted her attention. Her mother had died at the age of forty-five from uterine hæmorrhage.

Her state at that time (Nov. 27) was as follows:—

She was of a sallow dark complexion: the features œdematous;

the eyes prominent ; while the expanded nostrils and a hurried anxious manner, with frequent and difficult respiration, formed a painful picture of dyspnœa.

From the waist upwards the integuments of the chest, throat, and upper extremities, were anasaruous. The left hand and arm were enormously swollen, and the right mamma ; the left was also œdematous, but less so.

The superficial veins from the waist up, were all considerably enlarged ; commencing abruptly with a large branch in the epigastrium. The external jugulars were enormously swollen and tortuous.

There was no ascites nor any œdema of the lower extremities. The urine was scanty, loaded with lithates ; not albuminous. There was slight cough without expectoration ; no hæmoptysis had ever occurred. Considerable dyspnœa existed, and she could not lie in bed without having the head and shoulders raised by several pillows. Her nights were restless, and slight sweats began about this time. The pulse was 90 ; irritable ; the left radial perceptibly smaller than the right. The digestion was impaired ; appetite deficient ; the bowels constipated. No pain was complained of in the chest or elsewhere.

A physical examination of the chest gave no satisfactory result, owing to the œdematous state of the integuments.

A quarter of a grain of elaterium was ordered, which produced most copious watery stools during the succeeding twelve hours, while her strength was supported by wine and nourishing broths, which she had before that been denied, under the idea that the case was one of inflammatory dropsy. She experienced immense and immediate relief to the dyspnœa, and the anasarca was so far removed as to permit of an accurate examination of the physical phenomena, which were as follows :—

The chest was emaciated ; the intercostal spaces not prominent : the measurements equal on both sides. There was considerable immobility of the right chest.

Dulness on percussion existed over a space of about three square inches occupying the upper portion of the sternum, and beyond it encroaching a little on the right lung, while inferiorly and to the left side, it was continuous with the cardiac dulness,

which was more than usually extensive. Over this space there was complete absence of the respiratory murmur, but the sounds of the heart were distinctly heard. There was no impulse, soufflet, or other murmur. Healthy respiration was heard anteriorly over the right lung, both above and below the patch of dulness described. The left chest anteriorly was perfectly normal. The cardiac dulness was unusually extensive; the sounds natural. Posteriorly there was slight dulness along the spine at the root of the lung on the left side where the heart's sounds were also audible; they were not heard in the right corresponding space. With this exception, respiration and percussion sounds were natural over both lungs posteriorly. The diagnosis formed at the time was a tumor in the anterior mediastinum encroaching on the right lung, pressing on the *venæ innominatæ*, and the superior cava or right auricle, as was evident from the external venous congestion and dropsy. The fact of the anasarca and venous congestion being entirely limited to the upper half of the body would of itself have pointed to some obstruction in the current of blood in the large veins in the chest, while the existence of dulness on percussion over the sternum, indicated a tumor in that position. The situation of the dulness was also opposed to the idea of empyema, or of pneumonia, or of other diseases producing consolidation of the lung. The diagnosis, therefore, lay between aneurism and some solid tumor commencing in the anterior mediastinum. The absence of murmur and of impulse was negative evidence against the existence of aneurism.

On the other hand, the age and aspect of the patient, and the fact that her mother had most likely died of uterine disease, favoured the idea that the growth was of a cancerous nature. This opinion was recorded at the time.

On the 20th of December, under the occasional use of elaterium, the anasarca had nearly completely subsided; the venous distention was rather increased. The dulness on percussion had extended towards the right side. The cough was becoming troublesome; the dyspnoea increasing. About this time she was seized with severe pain in the right side, with great distress of breathing and anxiety. She thought she was dying; this feeling lasted for twenty-four hours, and was followed by a perceptible

increase in the extent of the dulness to the right. Severe sweats now set in.

For two months she got gradually worse, her distress and weakness increasing, and the physical signs extending towards the right side.

On the 6th of March she was seen by my friend Dr. Quain with me. She was then much exhausted, sat day and night bent forward harassed by cough and a constant sense of suffocation. Dysphagia had now commenced, so that she could scarcely swallow fluids; a small solid morsel was most easily got down. About this time three small hard tumors, the largest about the size of a nut, formed in the right axilla and right arm. The dulness and absence of respiration had now extended to the right clavicle, and over the whole right side, excepting a small space at the base of the lung anteriorly and posteriorly; the left side gave puerile respiration. On this occasion a small hard tumor was observed in the left breast, which tended to confirm the diagnosis already formed, in which Dr. Quain fully concurred. A murmur was heard at the apex of the heart accompanying the first sound.

On the 26th, the left radial pulse was nearly obliterated, and from this time her sufferings from a sense of strangulation in the throat were very painful to witness. She sank without convulsion on the night of the 9th of April, her senses remaining clear to the last.

Post-mortem examination fifteen hours after death.—On opening the chest, strong adhesions existed between the pleuræ on the right side. A solid, firm tumour occupied the anterior mediastinum, pressing on the right auricle, the termination of the superior vena cava, the aorta, the trachea, bronchial tubes, and œsophagus. It also extended to the back of these parts, and was of irregular shape, being moulded, as it were, upon the different parts to which it was applied. It encroached on the right lung, and extended deeply into its structure, but did not reach as high as the clavicle; the upper lobe of the right lung being studded (all but its extreme apex) with tuberculous matter. The left lung was healthy.

The heart was small and universally adherent to the pericar-

dium. There was some thickening of the margin of the mitral valve. The superior vena cava was almost entirely obliterated, not admitting a probe, and the right pulmonary artery, which passed through the tumour, was much narrowed.

A scirrhus tumour existed in the left mamma, and a small hard subcutaneous swelling in the right axilla. The liver, kidneys, and uterus were healthy.

Dr. Quain carefully examined recent specimens of the encephaloid mass, and of the tuberculous deposit, a combination which, though rare, is occasionally met with, and he has drawn up the following clear report on their character.

Dr. POLLOCK, 20th of April, 1852.

Report on the Microscopic characters of the Diseased Tissues in the preceding case.

ENCEPHALOID MASS.

1. On section of a pearly-white colour; spotted freely with vascularity, and with apparently effused blood.

2. Of solid (elastic) consistence but friable, yielding on gentle pressure a quantity of viscous pearly-coloured fluid or juice.

3. With the microscope found to consist of a great number of cells enclosed in large meshes formed by the interlacement of bundles of a filamentous tissue, *sui generis*. The cells are rather larger than blood-corpuscles, are of all shapes, but generally spherical, and contain from one to five nucleoli. These are rendered more distinct by acetic

TUBERCULOUS DEPOSIT.

1. Of a pale yellow or buff-colour, not presenting any appearance of blood or blood-vessels.

2. In some portions solid and tough, in others of a cheesy consistence, and in others of that of thick cream; the solid parts not affording fluid or juice on pressure.

3. With the microscope found to consist of cells, granular particles, and fragments of broken-up fibres, also to contain some fine filaments disposed without arrangement, and evidently derived from the lung texture. The cells, which are mostly spherical, are smaller than those from the encephaloid mass, and contain apparently

acid. Few cells contain distinct nuclei. There are also numerous compound granule or mulberry cells—and in many points oily particles. Blood - vessels and blood-globules abound.

more numerous and much smaller granules. These, as in the latter, are rendered more distinct by acetic acid. Oily particles are seen more especially in the softened matter. Neither blood-globules nor vessels are seen.

Dr. R. QUAIN, 20th of April, 1852.

6.—*Diseased Lungs, Spleen, and Kidneys, after Empyema.*

S. F., aged nine years, had symptoms of pleuro-pneumonia six months before her admission to the Westminster Hospital; and felt ailing ever since. The heart was felt beating at the right nipple, and she presented the ordinary physical signs of empyema. No pain in the loins on admission, no albumen in the urine. She was tapped May 13th, 1851, and 32 ounces of pus were drawn off; the wound being kept open, she appeared better afterwards; and several ounces passed away daily. She improved in health till February 1st, 1852, when a catamenial discharge appeared for the first time; œdema of the face was observed, and the urine was found to be albuminous; then, and not before, pain in the loins was complained of. She died March 8th, from exhaustion.

Post-mortem examination.—*Kidneys* large, capsule slightly adherent, and stellate on the surface, which was very pale; the tubuli of the cortical substance were universally impacted with abundant granulous stuff; the basement membrane less apparent than natural; after the action of acetic acid, it became very apparent in some tubes, but not in others: some tubes are rendered quite opaque by oily matter, others are distended irregularly. The medullary tubuli are rather less transparent than natural, but not infarcted to any extent, or broken up. There are no cysts. The Malpighian tufts are very much obscured. There is some granulous matter effused among the matrix.

Liver apparently healthy; fatty degeneration of the margins; yellow matter in the interior two-thirds of the lobules. The

fibrous tissue of the portal canals increased slightly, not that lining the fissures.

Spleen bacon-like; the new homogeneous matter occupies the site of the Malpighian bodies, and is separated by remains of the red pulp; it consists of the natural nuclear particles mingled with the homogeneous matter in nearly equal proportions.

Left lung condensed—both lungs contain tubercles—the left pleural cavity contains several ounces of pus.

Dr. HAMILTON ROE, 16th of March, 1852.

DISEASES OF THE HEART AND OF THE OTHER ORGANS OF CIRCULATION.

1.—*Tuberculous Infiltration of the Heart and several parts of the Body of an Infant, the Lungs remaining free.*

A male child, aged eight months, was brought to the Central London Ophthalmic Hospital, on the 29th of December, 1851, with a peculiar swelling of the lids, and tumors in many parts of the body, such as the scalp, lobes of the ears, shoulders, joints of the arms, and about the legs. The genitals were swollen to about three times their natural size; the testes hard and knotted, and the prepuce terminated by an enlargement. These tumefactions were all hard and livid.

The history showed that until five months old, the child was healthy, then the lids swelled, and, afterwards, the other tumors appeared. He took the breast well, and slept well, and, except being cross, showed no other evidence of disease than that which was apparent. He died on the 17th of February.

The head was not examined. The lungs were healthy. The heart, as shown in the specimen, contained tuberculous matter, and so did the liver and the testes. The swelling of the lids proved to consist of infiltration of the same nature, in the palpebral cellular tissue, and all the other swellings were from like deposits in the cellular tissue of the parts.

Mr. HAYNES WALTON, 16th of March, 1852.

2.—*Hypertrophy of the Heart; Pericarditis, extensive Effusion into the Pericardium.*

J. D., aged forty, was first seen on the 15th May, four days before his death. He had suffered for two years from gradually increasing anasarca of the lower extremities—dyspnœa and palpitation. He now presented the following symptoms. There was extensive anasarca of the whole body, upper and lower extremities, and of the features, the lower limbs and scrotum being enormously distended, the integuments tense and shining. His aspect was pale, his manner anxious and hurried, and his principal complaint was of intense dyspnœa, which confined him to a sitting posture day and night. About six ounces of pale, highly albuminous, urine were passed in the twenty-four hours. The radial pulse was small and very rapid; the extremities were cold. The bowels were constipated; the tongue white but moist, and he complained much of thirst. The cardiac dulness, on percussion, was found to be very extensive; the impulse diminished, and a friction sound was audible over a large surface, but most perceptible superiorly, although it was distinct at the apex of the heart. The posterior inferior portions of the chest, on both sides, gave a dull sound on percussion. The diagnosis formed was hypertrophy of the heart, recent pericarditis, and commencing effusion into the pericardium, with effusion into both pleuræ. On the 12th, the friction sound was audible only over the base of the heart; the dulness as before. On the 13th, the *frottement* was no longer audible. He sank the following day.

Post-mortem examination forty hours after death.—A considerable amount of fluid was found in both pleural sacs. The pericardium was enormously distended, and, on opening it, thirty-five ounces of bloody serum were taken from its cavity. The surfaces of the heart and the pericardium were rendered rough and granular in appearance throughout, by deposits of lymph, which were especially remarkable over the right auricle. The heart itself was greatly enlarged; the ventricular walls nearly an inch in thickness. The structure of the valves appeared healthy. The columnæ carneæ connected with the mitral valve were of great thickness. The liver was of the natural size, much congested, and of a yellow granular

structure. The kidneys were both small, and much congested ; decomposed when examined. Dr. POLLOCK, 18th of May, 1852.

3. *Fatty Degeneration of the Heart, causing Death by Rupture of the Left Ventricle.*

The heart, for an opportunity of examining which, as well as for several details of the case, Dr. Quain said he was indebted to Dr. Drury, was removed from the body of a lady of rank, aged sixty-eight years. This lady had been peculiarly subjected to distressing accidents in her family, which had been sources of much mental anxiety. For the last ten years she had been looked on as nervous and irritable, frequently passing her nights without sleep. She latterly felt most things a trouble to her, and two years ago left Tunbridge Wells, owing to the inconvenience which the hills of the district caused her. She frequently complained of being bilious, and referred to the sternum, as the seat of heaviness and oppression. She had occasional cough, with expectoration. Her usual medical attendant (Mr. R. F. Brown) informed Dr. Quain, that though frequently complaining, she was never regarded as being seriously ill, and that some two or three years ago or more he had attended her for some small abscesses which had appeared on her neck. About six or eight months subsequently, whilst this gentleman was attending another member of the family, this lady requested him to feel her pulse, observing, that she was "sure it was not a good one." He found it irregular and uncertain in its action. This state of pulse disappeared during a short attack of bronchitis which occurred soon afterwards, but reappeared as his patient got well. The pulse during this time was between 70 and 80. During two months before her death she was staying at Brighton, and whilst there complained of general *malaise*, of numbness of the fingers of the left hand, and of a tingling or uneasy sensation over the surface generally. She consulted a medical gentleman, who attributed her ailment to nervousness. She returned to London in this condition on October 10.

On Oct. 19, at half-past six in the morning, she had a rigor, with nausea and "spasms in the stomach," which lasted half an

hour, and were so severe as to bend her double. She was relieved by sinapisms, and mild anti-spasmodics, and rose at her usual hour (8 A.M.) to breakfast. Mr. Brown saw her subsequently, and found the pulse had altered from a full, though uncertain and irregular beat, to a small and contracted one. In the evening she was better. At 9 P.M., however, she had a second and a more severe attack. The pain extended to the back. She passed a quiet night. October 20, the bowels were relieved by castor oil early in the morning; and at half-past ten she had a third attack. She was sick twice during the day, and expressed her conviction that she was more seriously ill than was supposed by her family, and that she should die suddenly. At 10 P.M. she was seized while lying in bed, and about to take some arrow-root, with a fourth spasm. She shrieked loudly, raised herself in bed, or attempted to do so, and died instantly.

Post-mortem examination.—The body generally abounded in fatty tissue. The organs were healthy, except those about to be mentioned. The pericardium was distended by sixteen ounces of blood partly coagulated. This blood had escaped from a rent in the anterior wall of the left ventricle one inch in length, parallel with and close to the septum. There was no very great amount of fatty growth on the heart, but in the neighbourhood of the rupture, and onwards to the apex, the muscular fibre had undergone fatty degeneration to a very marked degree (a specimen showing the oil-globules within the sarcolemma was placed under the microscope). It was of interest to observe, that other parts of the heart showed the muscular fibre to be in a remarkably healthy condition. There was thus, in fact, almost a local or circumscribed degeneration, which, it was further of interest to observe, was connected with a branch of the coronary artery distributed to this part of the heart, which was nearly occluded by calcareous degeneration of its coats. The liver was greatly enlarged and fatty.

Dr. Quain said, that the present was an extremely good example of the morbid condition, which had been, as he thought, very appropriately named fatty degeneration of the muscular tissue of the heart, as distinguished from the mere growth of fat on the surface, and also of one of the conditions, viz., obstructed

circulation in the coronary arteries, on which this morbid state depends. It was likewise a good illustration of the connection between rupture of the heart and fatty degeneration of the fibre. He remarked in reference to the diagnosis of this affection, that there were sufficient facts in the preceding history, if attention had been directed to them, to justify more than a suspicion of the existence of this or of some allied state of the heart's texture, which then might have obtained further attention and watching. He, and not only he, but others, had found many of these cases, in the earlier stages, amenable to treatment, while in the more advanced, a knowledge of their existence led to those precautionary measures being adopted, which would in many cases protect life from a sudden termination, a result which had been made painfully familiar to the public by several remarkable instances of the occurrence of this calamity during the last few months.

Dr. R. QUAIN, 18th of Nov. 1851.

4.—*Rupture of the Heart, consequent on fatty degeneration, associated with softening of the brain.*

Mrs. M. F., aged fifty-two (at the time of her death), was rather above the middle stature, and of a fat, but leuco-phlegmatic habit of body. She was in the middle rank of life, was very temperate, had had a large family, and for many years had undergone most severe domestic troubles. On the third of September, 1848, she was attacked with paralysis of the right arm and leg, and loss of speech. The sensibility of the paralysed limbs was not affected, nor was consciousness lost. In the course of a fortnight speech returned, though with imperfect articulation, which was permanent. The power of moving the leg began to return at the end of six or seven weeks, and after three months she could walk with some help. The use of the hand and arm was regained much more slowly, and in a more limited degree. No second attack of hemiplegia occurred; but, at intervals of a few months, she suffered from attacks of pain in the head, with the appearance of a ball of fire, or of flashes of light before the eyes, followed by "visus dimidiatus," one half of the field of vision, and of any object to which she directed her eyes, appearing quite

dark. These attacks, which lasted about a week, were usually attended with difficulty, or even complete loss of speech. There was no affection of the intellect except slight impairment of memory ; but this seemed not to be constant, or it varied in degree. The persistence of some paralysis of the right side of the body, and the general feebleness which had come on during the last few months, make it difficult to determine with certainty whether the more common indications of fatty degeneration of the heart existed ; for she necessarily walked very slowly, and ascended stairs with difficulty. It was, however, her habit to pass the day on the ground floor of her house, while at night she slept on the third floor. She appears never to have complained of ordinary breathlessness or palpitation, and never was known to faint. But latterly she spoke of a sense of oppression at the chest, and a desire to draw her breath more deeply than she found she could do. Her pulse was feeble, and Dr. Baly believes he has occasionally found it intermittent. He examined the action of the heart about six weeks before her death, and found both the impulse and the sounds feeble. On the 25th of Novr., 1851, she complained of pain in the chest, behind the middle of the sternum. This continued three or four days, and she felt much weaker, so that she did not leave her bedroom.' But on the 29th of November she appeared to her family unusually well. On the morning of the 30th she rose about half-past ten, and said she felt very well. Soon afterwards she was standing washing herself at the wash-stand at the side of her bed, when her daughter saw her suddenly throw up her hands without any cry, but with a momentary fixed stare of the eyes, then turn towards the bed, and fall towards it. Her daughter caught her as she fell. She did not move again, or even breathe. Her death was instantaneous. Her face immediately afterwards was very pale, with an exceedingly calm expression.

Dr. Baly, conjointly with Mr. Baker, of Bulstrode-street, examined the body twenty-two hours after death. The quantity of fat in every part was great. The skull was of extraordinary thickness ; the dura mater and arachnoid membranes were in a natural condition, and neither the surface of the hemispheres, nor their substance, presented any indication of disease. The lateral ven-

tricles contained about six drachms of perfectly limpid fluid. All the parts in the centre of the brain appeared healthy. At the base the arteries were extensively diseased, and in an extreme degree, being opaque and rigid, and in parts much contracted in diameter. These changes were by far most advanced in the basilar artery, and the branches forming the sides of the circle of Willis; the parts of the brain supplied by these arteries alone presented appearances of disease. The crura cerebri at their lower surface were of a mottled slate-grey colour, and, to the depth of a line, softened to a pulpy consistence. The left half of the pons Varolii was obviously flattened and contracted, and, when sliced, showed a considerable loss of medullary substance, in its place was a quantity of brownish cellular substance in a very irregularly-shaped cavity, which extended downwards towards the olivary body and the anterior pyramid of the left half of the medulla oblongata. The pericardium contained a large quantity (many ounces) of serum, and a large dark clot of blood, which completely enveloped the heart. The heart itself, firmly contracted, appeared of about the natural size. It had a very large quantity of fatty tissue about its base, in the course of the coronary vessels and their branches, and over nearly the whole surface of the right ventricle. The muscular substance of the right ventricle, where it could be seen, and that of the left also, in the neighbourhood of the septum of the ventricles, had its natural dark colour, with muscular fasciculi clearly distinguishable. But at the prominent rounded part of the left ventricle, over a space of about three square inches, the colour of the muscular substance was a mottled dull yellow, or drab and pink, and no fascicular or fibrous structure could be discerned. In the middle of this part, and just behind the left convex border of the ventricle, there was a rent in the wall of the ventricle, about an inch in length, commencing midway between the base and apex of the heart, and running downwards towards the apex. The edges of the rent were irregular, one in part overlapping the other, and they were separated by a thin dark clot. Below this principal rent, and nearly in a line with it, were two much smaller rents. When the left ventricle was laid open, its cavity was found larger and more nearly globular than natural, it being

dilated towards the apex, while its wall had at least its normal thickness. It was at the most dilated part that the degeneration of tissue and the rupture had occurred. A probe passed from without through the rent appeared between the smaller muscular bands at this part. The mitral valves were slightly thickened and opaque. The aortic valves were also thickened, and close to their attached border were rigid from bony degeneration. The rest of the heart was healthy, except the coronary arteries. These presented throughout numerous thickened, opaque patches of cartilaginous or fibro-cartilaginous texture. But they were all of about the normal diameter, and free from obstructions, except one branch of the left coronary artery, running from the base of the left ventricle towards the centre of the degenerated part. This branch, to the extent of three-quarters of an inch from its origin, was much enlarged, being prominent on the surface of the heart, and feeling to the finger as large as a crow's quill, and hard. All its coats appeared to be thickened, and were opaque, yellow, and rigid; its cavity was filled with a firm and nearly black coagulum. This dilated portion of the arterial branch ended abruptly, and its canal could be traced no further; it seemed to be obliterated at the very margin of the degenerated part of the ventricle. The arch of the aorta presented on its inner surface a continuous state of mottling, unevenness, and corrugation; and over a considerable space close to the origin of the great vessels was completely rigid. In the abdomen only the kidneys and liver were specially examined. The former were quite healthy; the latter merely presented some unevenness of surface, and some hardness of its substance near the anterior edge.

Microscopical Examination of the Heart.—It should be stated that the muscular substance of the heart generally was somewhat soft, and decidedly greasy. Portions taken from three different parts were submitted to the microscope. In portions from the septum of the ventricles, which to the naked eye appeared the most healthy part, the primitive fasciculi had all their natural characters. Only here and there one presented a chain of fat-like globules running down its middle for a short distance; and a multitude of oil-globules floated in the field of the microscope,

having previously, as it seemed, occupied the interstices of the primitive fasciculi. In portions taken from the right ventricle, which had more greasiness of tissue, a few fasciculi had a large accumulation of the fat-like globules in their middle, or narrow chains of them between the fibrillæ; while others had lost the transverse striæ either altogether or in a part of their length, and seemed to be formed of multitudes of minute shining granules, disposed for the most part in longitudinal lines, but of not quite equal size, and of larger diameter than the divisions of the natural fibrillæ. Lastly, portions taken from the sides of the rent in the left ventricle showed scarcely a primitive fasciculus which was not thus altered, and for the most part in a more advanced degree; the longitudinal arrangement of the shining particles being no longer apparent, while in many instances they were so large as to present more obviously the characters of fat globules. In all the specimens large fat globules floated free around the muscular fasciculi.

Dr. Baly remarked, that in this case the original attack of paralysis, affecting the right upper and lower extremities, and the tongue, leaving the face unaffected, and the sensibility of the paralysed parts unimpaired, and not involving loss of consciousness, was obviously referable to the lesion of old standing in the left half of the pons Varolii, and was explained in all its features by the seat and extent of that lesion. The increased impairment of general muscular power during the last few months might be due to the superficial softening of the crura cerebri; while the absence of any diseased change precisely accounting for the recurring temporary affection of vision was to be expected. The extreme suddenness of death, and the immediate cessation of the respiratory movements, rendered it almost certain, before the examination of the body, that the cause of the fatal seizure was to be sought, not in the brain, but in the heart or large blood-vessels. The principal cause of the rupture of the heart was manifestly the degenerated state of the muscular substance at the seat of the rupture. But the diseased appearances found accompanying the rupture in the heart were of the greater interest from their association with the analogous changes which had taken place in the brain. For it cannot be doubted, that the

destruction of substance in the latter organ was the consequence of the disease of its nutritive arteries; and it is scarcely less certain, that the far advanced degeneration of a limited portion of the left ventricle resulted from the diseased and obstructed condition of the artery of the part. The dilated state of the cavity, if only by increasing the extent of surface exposed to the pressure of the blood, probably aggravated in some measure the liability to rupture. But even the dilatation and hypertrophy of the left ventricle may reasonably be regarded as a consequence of the disease of the arteries; for the aorta and other arteries, rendered more or less inelastic by disease, would be a constant impediment to the propulsion of the blood from the left ventricle of the heart. All the other changes in the body may, therefore, be referred to this altered condition of the arteries, the pathology of which is at present so little understood. No arcus senilis was observed in the patient during life. At the beginning of the fourth day after death, when no sign of decomposition had shown itself in the body, the weather being very cold, the eyes were examined, and the corneæ found quite clear, without any appearance of a white or semi-opaque ring or arch.

Dr. BALY, *2nd of December, 1851.*

5.—*Fatty Degeneration of the Heart, causing Death by Rupture of the Left Ventricle.*

M. P., aged sixty-six, a cook in a gentleman's family, was taken ill, on the 2nd of January, with a slight attack of bronchitis. The night before, she had complained of pain over the region of the heart, which the application of a mustard-poultice had somewhat relieved; still, at times, it came on in slight paroxysms. Her principal complaint was a feeling of debility, and she thought that some extra work, which she had had for the past week, had been too much for her. The pulse was weak, irregular, and extremely intermitting; it averaged about 80. The heart's impulse was feeble, and of limited extent; the second sound was very indistinct. There was no murmur. Her breathing was quiet, but, on inquiry, Dr. Edwards (to whom Dr. Quain expressed himself as being indebted for an opportunity of examin-

ing the specimen, and for the notes of the case) found that, for a considerable period, exertion very much embarrassed it. She was frequently compelled to stop for a minute or two on the landings whilst going up stairs. There was a well-developed arcus senilis. She was removed to her own home next day, and it is reported that "the pain at the heart returned last night, and was again relieved by the poultice. The cough better; pulse continues the same."

4th. Feels considerably better; felt able, and wished to go back to her situation, but suspicions entertained respecting the heart, coupled with her age, induced Dr. Edwards to forbid this.

6th. This morning she called upon Dr. Edwards. The symptoms were better, except the pulse, which was both weaker and more intermitting; it was also slower—70.

8th. Called again this morning, and said she felt well. Her pulse was still weaker, and her gait unsteady as she walked across the room. Dr. Edwards begged her to go home immediately, and to keep herself quiet. She did not do so, but went to her late master's, where she remained until 4 P.M. (five hours), packing up her clothes. She then walked home to tea, after which she again went to her master's to fetch them away; carried parcels up the area-steps four or five times, and whilst in the kitchen about to leave with the last, fell down backwards and expired immediately. Dr. Edwards saw her in a few minutes, but there was no vestige of vitality left. The face was pale, the lower jaw was depressed, and the pupils were neither contracted nor dilated.

Post-mortem examination.—The body was that of a short and very thin spare person. On removing the sternum, the first object that attracted attention was the pericardium—of a bluish colour, and enormously distended with blood. On slitting the pericardium open, the heart was to the left side, and extravasated blood, to at least a pint and a half, occupied the right side. Two-thirds were fluid, the remainder coagulated. A further examination showed the heart to be rather larger than natural, and the right ventricle covered with more fat than usual. The left ventricle dilated. The walls of the right ventricle thin; those of the left about the natural thickness. The valves

healthy. The walls of the left ventricle and the right, though less so, everywhere flabby, soft, and of a dull red colour. A small rent was seen close to the septum, in the anterior wall of the left ventricle. This communicated with the cavity of the left ventricle. The tissue within the ventricle in the corresponding part was greatly broken down, and a cavity, which would hold half a walnut, was thus formed. This cavity was filled with broken-down tissue, and coagulated discoloured fibrin. Some of the muscular trabeculae were broken right across, and their edges were rounded off. The anterior branch of the coronary artery leading directly to the disease, was seen greatly ossified, and about the middle of its course completely obstructed. The broken-up tissue, when examined with the microscope, was found to be in a state of fatty degeneration, and the like condition in its earlier stages existed in various other parts of the ventricle. The lungs were healthy—slightly emphysematous. The liver was considerably congested, as was also the whole venous system; at least a quart of blood flowed from an incision in the jugular vein.

Dr. Quain said that in this case, as in one presented by him at a former meeting during this session (p. 262), the facts observed during life as illustrative of the diagnosis of the existence of fatty degeneration were strikingly distinct and worthy of attention. In both cases, too, the connexion between impaired nutrition and fatty degeneration, as exemplified by the ossified coronary artery leading directly to the seat of rupture, was most clearly shown.

Dr. R. QUAIN, 20th of January, 1852.

6. *Fatty Degeneration of the Heart. Ossification of the Aorta, Coronary Arteries, and Mitral Valve.*

The subject of this case, aged seventy-five, was found dead in her room, with appearances denoting that a struggle or spasmodic state had preceded death, her arms having been clasped round the bedpost.

She was reported to have been generally in good health, with the exception that she had complained of pain in the head for the preceding fortnight.

On examining the head, the lateral ventricles of the brain

were found full of fluid, as was also the subarachnoid space. The right vertebral, the basilar, and both carotid arteries were the seat of ossific deposits. The walls of the ventricles of the heart were supposed to present the microscopic appearances of fatty degeneration, but time did not permit of the examination.

Dr. POLLOCK, 3rd of February, 1852.

Report on this Specimen.—The heart was soft, easily lacerable, and mottled by patches of a buff colour, thickly interspersed. On one of them being torn it plainly showed that granular appearance to be remarked so often in instances of conversion of the fibres into fat. On some of the fibres, which were very friable, being placed beneath the microscope, they were seen to be most manifestly degenerated. A very few transverse striæ were remarked. There was fatty degeneration of the fibres; but very little fat was on or around them. Here and there the sarcolemma appeared to be nearly full of fatty particles; in other places the granules were more scattered and much less numerous, and presented the appearance figured by Dr. Quain in one of his accurate representations. (See Plate III. fig. 3 a, "Medico-Chirurgical Transactions," vol. xxxiii. and p. 196.)

Dr. Basham had assisted in the examination of the heart; and Dr. Quain, who had been good enough to inquire minutely into the state of the fibres, could confirm this sketch of their condition.

Death in this case, as in all similar instances, was not to be accounted for by the diseased condition of the coronary arteries, although, they probably indirectly aided it, by interfering with that supply of blood to the fibre, which is quite necessary to its due nutrition. The *immediate* cause of the sudden dissolution was to be sought for in that general state of degeneration, which had long, no doubt, seriously affected the irritability of the heart, and had, at length, made the continuance of its function impossible.

Had the small blood-vessels of the brain been examined, they would most likely have been found similarly degenerated. The age of the patient, the state of the heart, and, especially, the diseased condition of the large cerebral arteries, lend such a supposition high probability.

It is always of consequence in cases of this kind to note the presence or absence of the arcus senilis. The great age of the patient made us think that it was present; but it is not *necessarily* to be found even in the very old. This form of fatty degeneration has been already proved useful in diagnosing the like change of the heart. It may be found to give aid too in foretelling apoplexy and clearing up obscure cases of softening, for these diseases depend often on the same degeneration, and, to this extent, are allied affections. The arcus is the only indisputable *external* sign of true fatty degeneration, and carefully interpreted, will be found, in many difficult circumstances, a clue to the destruction proceeding within. At the same time it may exist, occasionally, as a local change, or be associated with but an inconsiderable degree of degeneration of vital organs, and found, therefore, quite compatible with years of vigorous and active life.

Mr. W. F. BARLOW, 17th of February, 1852.

7.—*Fibrous Degeneration of, and Deposits in the Substance of the Heart.*

A married woman, aged fifty, was admitted into St. Thomas' Hospital, on the 14th October, under the care of Dr. Bennett. From the age of six months she had been the subject of imperfect hemiplegia of the left side; for some time she had occasionally suffered from dyspnœa, and for two months had had anasarca of the lower extremities with increasing general debility. She did not confess to any palpitation or other local symptom having direct reference to the heart. She had some cough, but no evidence of pulmonary congestion; the liver was not enlarged, nor the urine albuminous; the countenance was tolerably healthy, the skin soft, and the tongue moist; pulse very small and feeble. The systole of the heart was attended by a loud prolonged bruit, loudest over the mitral valves, followed by a distinct, natural second sound, to which succeeded a remarkably prolonged interval of rest; the rhythm was frequently irregular. On the 17th she became suddenly more feeble, and this state increased, notwithstanding the use of stimuli, till the 18th, the day of her death.

Post-mortem examination.—The pericardium was found exten-

sively and firmly adherent. The heart was enlarged, both the right and left ventricles being dilated, and their walls hypertrophied. All the valves were healthy, excepting, perhaps, the aortic, which were somewhat thickened, but not to such an extent as to interfere with their functions. A vertical section through the left ventricle and aorta showed the walls of the ventricle to be increased in thickness and encroached on, and in parts replaced by some adventitious product. Towards the base, the muscular tissue gradually disappeared, at the expense of its outer part; so that, at the distance of three-quarters of an inch from the aortic valves, and from that point upwards, it was entirely wanting, and was replaced by a firm, dense, slightly translucent fibrous tissue, which extended some little way upwards on to the aorta, and downwards on the exterior of the muscle, gradually losing itself in the substance of the pericardium; opposite the aortic valves it was an inch in thickness; about two inches below the valves, was an irregular, opaque, yellowish, somewhat firm, circumscribed patch, which extended some little way into the substance of the muscle. On cutting further into the walls of the ventricle, several of these masses were found about as large as peas, or a little larger, having a yellowish-buff colour, tough and firm, and very much the appearance of the fibrinous deposit found in the spleen, &c. Some of these masses were circumscribed; in other spots the substance seemed diffused through the tissue of the heart. One mass projected into the right ventricle from the septum. The lining membrane over the septum ventriculorum was considerably thickened and roughened, and around the base of the left ventricle were several large irregular unorganized coagula; one larger than the rest occupied the cavity of a commencing aneurism about an inch in diameter, situated on the left side of the ventricle close to its base. The aneurism did not project externally. The walls of the right ventricle were also thickened; and here the muscular tissue was absent for the space of an inch and a quarter below the pulmonary valves, and was replaced by dense fibrous tissue. The lining membrane of the conus arteriosus was much thickened, and a thick cicatrix-like band extended round it immediately below the pulmonary valves, constricting

this part to such a degree that the orifice was less than that of the pulmonary artery. The thickening of the lining membrane extended beyond the conus arteriosus, and especially on the septum and anterior wall of the ventricle. The upper part corresponded to a fibrous degeneration of the muscular tissue. The thickened membrane over the septum presented numerous opaque yellow patches, which had the appearance of atheroma. Some of these were of considerable size, and corresponded to elevations, on section of which it was seen that the muscular tissue beneath was converted into a yellowish material, much resembling that found in the walls of the left ventricle. The masses were, however, larger, softer, less distinctly circumscribed; and one of them was softened in the interior, and contained a drop of a puriform fluid, (in which, however, microscopically, no pus cells were seen). The lungs were more congested than natural, but not otherwise unhealthy. Nothing worthy of notice was found in the other organs.

Dr. RISDON BENNETT, 21st of October, 1851.

Report on the microscopic characters of this deposit. — “The yellow, tough substance taken from different portions of the ventricle, including the walls of the aneurismal depression, which itself seemed to be formed by a softening and yielding of this substance, was found to consist of cells, of fatty particles, and of degenerated muscular fibres. These cells were generally spherical, in size from $\frac{1}{4000}$ to $\frac{1}{2000}$ of an inch in diameter, having very thin walls, easily broken down, and containing a few granules. There were also some, but not many, larger cells, with equally thin walls, oval or elongated in form, and showing nuclei in their interior. The structure and arrangement of the cells were rendered distinct by the action of acetic acid. The cells were generally so placed in lines, as to give the appearance of fibres, which have then a kind of concentric disposition. The fibrous, dense tissue in the right ventricle presented a structure very similar to that just described. There was nothing sufficiently decided in the structure to justify a decided opinion as to its nature. The specimen has been examined by several accurate observers, and very different opinions have been expressed, though none very positively, as to its nature. Thus, it has been thought to have

some of the characters of malignant disease, of tubercle, of concrete pus, and of fibrin or fibrinous deposit, such as is frequently observed in the spleen. This latter view of the nature of the deposit (that of Dr. Bennett and Mr. Simon) seems to be the most correct: and, if so, the specimen resembles one figured by Dr. Carswell, in the fourth fasciculus of his *Morbid Anatomy* (Plate 3), which is there described as illustrative of the conversion of the fibrin of the blood into fibrous tissue."

Dr. R. QUAIN, 4th of November, 1851.

8.—*Fibrous Degeneration of and Deposit in the substance of the Heart, connected with Acute Rheumatism.*

A gentleman, aged fifty, who, after nearly thirty years' service in India, returned to this country six months ago, was lately troubled by occasional attacks of diarrhœa, with progressive loss of flesh. During his residence in the tropics, he had served much in the malarious district of Sindh, and had suffered frequently from intermittent fever, with occasional bowel complaint. Of a naturally spare muscular make, and nervous temperament, he led an active life, while in India; and on the whole enjoyed tolerably good health. Though suffering now and then from slight illness, since his return to England, he went down into Lincolnshire to shoot, about the beginning of December, but never applied for any medical advice, trusting entirely for the restoration of his health to the effect of climate.

On the 11th of January last, having got wet and allowed his clothes to dry on him, he next day complained of chilliness running along his spine, followed by slight muscular pain in various parts of his body. Continuing to get worse, he sent for me on the 14th of the same month. I found him complaining of pain and tenderness in his loins, in the muscles of both shoulders and neck, and of an unpleasant tingling sensation shooting down the posterior part of both thighs to his heels. His pulse 110, irritable and jerking; his urine rather scanty and high coloured; his tongue white and coated; his skin cool; and his bowels moderately open from some laxative pills he had taken.

On the 17th the symptoms had increased in severity. There

was a harsh systolic endocardial murmur, accompanied by feeble impulse below the left nipple, slight crepitant ronchus in the right chest, with a scarcely perceptible cough. The area of præcordial dulness was of normal extent; the respiration quick but easy; there was no intercostal muscular pain on the left side, but much tenderness along the cervical and lumbar vertebræ, with pain extending to the muscles of both arms. The urine, which was acid, had a sp. gr. of 1034, and threw down on cooling a copious precipitate of urate of ammonia.

The patient had an attack of febrile heat, followed by copious perspiration, on the night of the 19th; and on the morning of the 20th, after having lost temper with his servant, I found him in an excited irritable state; the expression of his countenance anxious and depressed; his pulse feeble and intermittent at every beat. The area of præcordial dulness was rather less than natural, the percussion sound around being of a tympanitic quality. There was systolic endocardial grating murmur, accompanied by feeble impulse, for about two inches and a half below the left nipple; the præcordial integuments were slightly œdematous; and there was harsh respiration both in the right chest and below the clavicle of the left. Dr. C. J. B. Williams saw him, in consultation with me, and confirmed the opinion of existing cardiac disease.

The patient was now quite unable to move either legs or arms from the severity of the muscular pains. The urine, which at this time had a sp. gr. of 1030, was loaded with urea, and became an almost solid mass of nitrate of urea on the addition of nitric acid after boiling. On the 22nd, after having passed a restless night, he had a chilly fit, accompanied by oppression at the chest, followed by pain within the left false ribs. He had slight cough with mucous expectoration, and there was a harsh endocardial murmur, with considerable impulse, two and a half inches below the left nipple. His pulse was now 98, feeble, but without intermission. From this date to the 26th, though troubled by irregular attacks of nocturnal fever, he had less rheumatic muscular pain of his upper and lower extremities, and fully regained the power of motion in both. On the 27th, after eating his breakfast, he complained of much flatulence of stomach, great oppres-

sion at the chest, and cardiac uneasiness. His pulse, which was intermittent, only numbered 55. The symptoms were relieved by a large blister to the chest, and counter-irritation between the scapulæ. Next day, the 28th, the oppression at the chest was gone; the pulse was 84, and regular, and the respirations were 19 in a minute. He had slight returns of these symptoms from the 29th of January to the 3rd of February, but they were relieved by counter-irritation at the epigastrium and between the scapulæ. The oppression at the chest, which somewhat resembled that of *angina pectoris*, was accompanied by much flatulence of stomach, pain at the epigastrium, and within the ribs of the left side, extending to the left renal region and inferior angle of the left scapula. On the 4th and 5th of February he complained of nothing but weakness, and could freely move both his upper and lower extremities. There was still an endocardial murmur below the left nipple, and the pulse, which numbered 86, was feeble. After having passed an excellent night, and eaten breakfast with relish, he was seized, at noon of the 6th of February, with coldness of his feet, followed by slight oppression at the chest, and uneasiness between the scapulæ; and appears to have died soon after from syncope, before his servant could call to his aid a neighbouring medical practitioner.

Examination after death.—The examination was made by Mr. Bullock, of St. Mary's Hospital, in the presence of Dr. Quain and myself. The body was somewhat emaciated, and the integuments over the chest were œdematous.

Chest.—The reflected pericardial surface was found in a state of dotted vascularity, and covered by a few streaks of recent fibrinous exudation. The heart, had its apex extended downwards to the lower edge of the sixth rib, and its left ventricle dilated. A vertical section through the walls of that ventricle showed them to be somewhat hypertrophied, they being nearly half an inch in thickness. The normal redness of the muscular tissue was in many places changed to a faint yellow, or fawn-coloured substance, occasioned apparently by the interstitial deposition of lymph; and in some places this fibrous degeneration was seen running into the cordæ tendinæ, impairing, no doubt, the contractibility of the muscular tissue. The mitral valve was

slightly thickened at its margin. Both lungs were emphysematous and considerably congested, more particularly the left one posteriorly, which adhered there to the costal pleura by old and firm adhesions. Three or four ounces of bloody serous effusion were found in the cavity of the left chest.

Abdomen.—Both lobes of the liver had a finely granulated appearance, and were of a nutmeg colour. The left lobe was softened. The spleen, which was nearly twice its natural size, was a soft bloody pulp, presenting here and there, when cut into, large buff-coloured patches of fibrinous deposit. Its investing membrane was white and thickened from previous disease. The kidneys, which were in a state of vascular congestion, were quite natural in structure. The other viscera were not examined.

I have abstained, in this communication, from entering on the general principles of treatment pursued in this case of muscular rheumatism, which appears to have been associated with a previous constitutional state of blood lesion, caused by malarious influences, and the change from a warm to a cold climate. It is chiefly interesting as illustrative of those fibrinous conditions of the blood, which, on the application of the exciting cause of cold, disturb the balance of healthy action in several organs, and give rise to the imperfect appropriation of the nutritive fluid by particular tissues. The character of the fibrinous deposit, in the present case, observed in the heart and spleen, is illustrative of this conversion of the fibrin of the blood, according to the localized inflammatory action of various tissues. Dr. Handfield Jones, who has examined the microscopic character of the deposit in the spleen, states that he found it to present nothing but the usual characters of fibrin. My friend, Dr. Quain, has taken pains to draw up the following lucid report on the microscopic character of the deposit in the heart.

Dr. JAMES BIRD, 17th of February, 1852.

Report on this Specimen.—The heart is flabby, pale and mottled in some parts with blotches of a still paler colour. A few small patches of apparently recent fibrin exist on the pericardial surface. Slight thickening of the margin of the mitral valve may be observed. There is seen, on cutting through the mus-

cular substance of the left ventricle, towards the apex, a patch of a pale yellow or buff colour, about five lines in depth and three lines across. On further section, this is found to be the cut surface of an irregular layer, of a like substance extending across the anterior wall of the left ventricle, and passing into the septum for a short distance. An extension of the same passes up through both columnæ carneæ of this ventricle, more especially the left. On close examination, this substance is found to be of a solid consistence, and to present a fibrous-like appearance. It is bounded by a bluish-red line, which separates it from the muscular tissue of the heart. This boundary does not exist uniformly, and is seen to be absent more especially in the columnæ carneæ. The surrounding muscular fibre is pale, and in several parts fatty degeneration exists. Examined with the microscope, the buff-coloured substance is found to be composed of the muscular fibres of the heart, some of which retain their healthy structure; some have undergone fatty degeneration, and a few are irregularly broken up. All are covered with an immense number of oily globules and granules which lie external to the sarcolemma. This appearance is very different from fatty degeneration of the fibre itself, and is the result apparently of a degeneration which has taken place in some deposit that has occurred external to the fibre. The bluish boundary line is found to consist of a fibrinous deposit in which numerous blood-globules, compound granular cells, nucleated filaments, and broken-up muscular fibres can be seen. There is here evidently a process of deposition going on. It is difficult to say whether the deposit at this point is about to undergo degeneration, like that more deeply-seated, or whether there is here an attempt, by nature, to circumscribe the injury which had previously taken place. The appearance of the columnæ carneæ under the microscope is similar to that above described. Many fibres are in a state of degeneration; all are covered with abundance of oil globules, and, towards the surface, some nucleated filaments exist. The disease in these columns must have sufficed to interfere with the functions of this portion of the heart's mechanism. A careful review of these morbid appearances in connexion with the history of the case, and the deposit in the spleen seems to be con-

clusive that the appearances are the result of a fibrinous or albuminous effusion into the walls of the ventricle, which effusion has undergone, to a great extent, fatty degeneration, and they correspond in many respects with those observed in a heart presented by Dr. Risdon Bennett, at a former meeting of the society.

This sketch would be imperfect without directing attention to the further change which would in all probability have occurred in this deposit. Had the process of softening continued, a circumscribed abscess must have been the result, or had absorption of the deposit taken place, a fibrous degeneration of the ventricle would have been found. Aneurism of the walls of the heart has been traced to both these conditions, and it is highly probable that the present case affords an interesting illustration of the earliest stage of a process, which often leads to this pathological condition.

Dr. R. QUAIN.

9.—*Fibrinous Deposit in the Walls of the Heart.*

The specimen consisted of the left side of the heart, the muscular structure of which was exceedingly firm generally, but the parietes of the ventricle towards the apex, and especially a portion very near to the septum of the ventricles, contained a firm yellowish buff-coloured deposit. This deposit had a definite rounded margin, and, to the extent of about two inches in length, occupied the entire thickness of the muscular walls, which at this part were much thinned, and had a tough leathery consistence. Moreover, one of the columnæ carneæ, which was paler than its fellows, was affected, as to its central part, by a like deposit, which consisted—as demonstrated by the microscope—of granular amorphous and fatty granular matter, with large numbers of nuclear-like cells, some of which were taking on them a fibrous character. In addition, much of the muscular structure in the immediate neighbourhood had entirely lost its true character, all evidence of a striated condition being for the most part lost, and, in some, a perfectly fibrous one assumed. Corresponding to the external surface of the distinct deposit before mentioned, there was complete union of the opposed layers of the pericardium in the same manner that the pleural surfaces are often adherent

in parts corresponding to deposits of fibrin in the hepatization of pneumonia ; and, on the internal surface also there was adherent, with tolerable firmness, a mass of coagulated fibrine and blood, apparently of some standing, which was for the most part, though not entirely, removeable by a little tact, leaving a shining endocardium beneath. These facts are mentioned as showing that the instance was not one of fibrine accumulated in an aneurismal sac, &c. The whole muscular structure of the heart, but especially the left side, was in a very fatty condition, and the cavities on that side were much distended, but the valves and orifices were natural. A small amount of atheromic deposit existed at the root of the aorta, and in the coronary arteries. This specimen was from a woman aged twenty-two, who, when first treated, was in an extreme state of exhaustion, and was stated to have spat blood for some days ; but no correct history was obtainable. She died with intense dyspnœa and cough, her extreme suffering prohibiting any physical examination ; the post-mortem examination gave evidence of extensive recent pneumonia and of old standing pleurisy. It seems probable that the dilated condition of the cavities of the heart was owing to the general fatty condition, followed by a state favouring the fibrinous exudation which gave to the organ its firm consistent character. This latter state was probably common also to the so-called "hepatized" lungs and the pleurisy.

Dr. OGLE, 4th of May, 1852.

Report on this specimen.—The specimen presents appearances in accordance with those described by Dr. Ogle.

The substance of the heart generally is remarkably flabby and pale, and the fibres, when examined with the microscope, are found to present an almost entire absence of transverse striæ, with, in many situations, extreme fatty degeneration. The white patches, some of which are tough and firm, present the appearance of small cells containing a few granules, and broken-up fragments of fibres. This deposit, which is evidently of a fibrinous character, surrounds and conceals the muscular fibres of the texture, where the deposit had taken place. Some of the patches which are soft and friable present the appearance of oil-globules and granular particles.

Dr. Quain added, that this case corresponded to two specimens presented at former meetings during the present session. The first by Dr. Risdon Bennett ; in whose case the deposit seemed to have been of some duration, and in some measure in process of change in accordance with its more chronic character, *viz.*, that of assuming a fibrous structure ; in the second case, that presented by Dr. Bird, a more recent deposit was undergoing fatty degeneration in apparently a rapid manner. Dr. Ogle's specimen seemed to exemplify the simultaneous existence of both forms of these morbid processes.

Dr. R. QUAIN, 18th of May, 1852.

10.—*Extreme Contraction of the Tricuspid and Mitral Apertures, from old Endocarditis.*

The subject of this unusual case was a woman, aged thirty-seven, of strumous constitution, and very feeble both in mind and body. Neither she nor her friends were aware of her having ever had rheumatism ; but for the last ten years she has occasionally had dyspnœa, winter-cough, palpitations, and faintings on slight exertion ; and when weakened by diarrhœa in 1849, she had anasarca of the feet.

She was in usual health and activity until the end of September. I saw her first on October 15, 1851 : she had a pallid countenance, strongly expressive of severe cardiac disease, livid lips and nose. Her respiration was embarrassed ; there was great anasarca of the legs and ascites, the hypogastric regions were tender, the liver descended to the navel, and there was pain at the præcordia. Her extremities were cold, the pulse scarcely perceptible ; urine scanty, and free from albumen. The left side of the thorax actually trembled with the tumultuous impulse of the heart, which beat 120 per minute violently, and with a loud rough systolic murmur, the diastole being noiseless, but much masked by the former. This loud rough murmur was heard over three-fourths of the chest, and loudest at the apex of the heart. The jugular veins distinctly pulsated. Bowels costive, urine scanty, and free from albumen.

She was relieved by mercurial purgatives, and further by diuretics, &c.

In a fortnight, the loud rough sound was heard accompanying the short feeble diastole as well as the systole of the heart, most distinctly between the spine and the left scapula, concurrent with the peculiar trembling of the left chest. Dr. Peacock (who then saw this case) agreed with me in inferring that recent pericarditis had supervened on older valvular disease. The sounds of the heart subsequently became less loud and rough, and that of the diastole free from any. As the very cold weather set in, she became, worse, however; bronchitis and œdema of the lungs with increased engorgement of other organs gradually advanced, and she died on the 6th of December.

The pericardium was free from every sign of inflammation. The heart weighed 9 ounces. The right auricle was enormously dilated, being nearly three inches wide by two inches deep. Its walls were very thick where the strong pectinate muscles traversed them, measuring on an average two French lines, but in the intervals they were translucent. In the true auricle was impacted a large thrombus.

The right ventricle was somewhat dilated; its walls were on the average as thin as those of the auricle. The foramen ovale was closed. The tricuspid valve was greatly contracted—its diameter measuring only five-eighths by three-eighths of an inch, and twenty-one French lines in circumference—by the deposit of fibrin under its serous membrane, especially on the right curtain, which formed a thick and very firm ring, permitting very easy regurgitation. So useless was this, the tricuspid valve, that the fleshy columns attached to the right and anterior curtains were quite atrophied, and the moderator band seemed to be a mere membrane without muscular fibres.

The orifice of the pulmonary artery was three inches and a quarter in circumference, and its valves healthy. The ductus arteriosus was obliterated.

The left auricle rather hypertrophied; the left ventricle decidedly so; its walls measured less than half an inch thick. The left auriculo-ventricular opening was occupied by fibrinous and calcareous deposit under its lining membrane, so as to contract it to a slit measuring three-fifths by a quarter of an inch in diameter, and less than two inches in circumference. The mitral

valves and tendinous cords were thickened ; the fleshy columns strong and vigorous.

The aortic aperture measured three inches in circumference ; its valves were thickened, and the anterior and right valves were so firmly agglutinated as to interfere with their action, and to allow of slow regurgitation.

The aorta and coronary arteries were healthy.

Lungs were engorged and œdematous ; the bronchi full of secretion.

The liver was much enlarged by venous congestion and indurated.

The kidneys and spleen were merely congested.

The brain was not examined.

Mr. E. PYE SMITH, 20th Jan. 1852.

11.—*Small Aneurism of the Left Ventricle and Mitral Valve.*

This specimen was forwarded to Dr Peacock by Dr. Thurnam, the Resident Physician to the Wiltshire County Asylum. It was removed from the body of a man, a patient in the Asylum, aged sixty, who had been of intemperate habits and died of pneumonia. The sac when recent was covered by coagulated fibrine ; it was situated at the right extremity of the ring, to which the posterior fold of the mitral valve is attached, so that its opening was partly covered by the valve. The orifice by which it communicated with the left ventricle was of an oval shape, having its largest diameter in the course of the ring, and it was about six lines in length. The sac, though small, was partly biloculate ; one portion projecting into the substance of the ventricle, the other occupying the mitral valve, and opening by an aperture about three lines in diameter, into the cavity of the left auricle. The sac contained partly decolourized coagula, and the edges of the opening were rough and irregular from the deposit of lymph.

Dr. Peacock remarked that the occurrence of aneurism of the valves had been known to pathologists since the time of Morand and Morgagni. Dr. Thurnam in his "Memoir on Aneurisms of the Heart," alluded to a case which occurred to Dr. Watson, and to a second in the Museum of St. Thomas' Hospital, and since the

establishment of the Pathological Society, specimens had been exhibited at its meetings by Mr. Coulson, Mr. Prescott Hewett, and himself.

Dr. PEACOCK, 17th of February, 1852.

12.—*Regurgitation through the Left Auriculo-Ventricular Aperture, from Dilatation of the Orifice.*

The subject of this case was a girl, nine years of age, a patient of Dr. Peacock, at the City of London Hospital for Diseases of the Chest. She had always been delicate, but became much more so after suffering from whooping-cough at the age of four or five. Three years before her death she had chorea, from which she recovered in a short time, and continued tolerably well till fourteen months before, when she had a severe attack of influenza, and during her recovery began to experience palpitation, dyspnœa, and other symptoms of cardiac disease.

When first admitted as an out-patient, in January, 1851, she had been suffering from the latter symptoms for about two weeks, and on examination the præcordial region was found unduly prominent, the dull space was extended, and a purring tremor was distinctly felt, then a loud systolic murmur was heard over a limited space at the apex, and at the lower angle of the scapula; pulsation was observed in the left, but not in the right jugular. Under the course of treatment pursued she improved in some degree, and in July was able to go into the country. While there she was taken much worse, and ever after continued to decline; the palpitation and dyspnœa became greater, and dropsical symptoms appeared: she died in December.

On *post-mortem examination* there was found much effusion into the pericardium, pleuræ, peritoneum, and cellular membrane. The organs of the body were congested, but, with the exception of the heart, not diseased.

The pericardium adhered to the heart by two or three old cellular attachments. The heart weighed $10\frac{1}{2}$ ounces, fully double its natural weight. There was some degree of hypertrophy of the right auricle and ventricle, and the cavities were large, but the chief disease was limited to the left side. The cavity of the left auricle was very large, and its lining membrane was through-

out much thickened and indurated. The left ventricle was also hypertrophied and dilated, but the valves were free from any material disease; the left auriculo-ventricular aperture had, however, undergone very considerable dilatation, so that it very greatly exceeded the capacity of the other apertures; the circumference of the aortic, pulmonic, and tricuspid apertures being respectively thirty, thirty-three, and thirty-six French lines, while that of the mitral aperture was fully forty-five lines.

Dr. Peacock remarked that he believed that regurgitation through the left auriculo-ventricular aperture, wholly resulting from dilatation of the orifice, unconnected with valvular disease, was far from frequent; indeed, of a considerable number of cases of cardiac disease of which he had notes, only one was of this description. He believed also that in young persons this form of disease was especially rare.

It was difficult in this case to fix the date and mode of origin of the cardiac disease, but he thought it probable that during the attack of influenza, the little girl had had peri- and endocarditis, which had laid the foundation of the malady.

Dr. PEACOCK, 20th of January, 1852.

13.—*Obstructive Disease of the Aortic Valves, dependent on Malformation—small Aneurism in the Ventricular Septum.*

The subject of this case was a man, aged forty, who was admitted into St. Thomas' Hospital, under Dr. Peacock, in July last. He had been ailing for eleven weeks, but before that time had never suffered from any serious disease or injury. His illness commenced with slight rheumatism and dyspeptic symptoms, and to the latter were superadded, soon after his admission, considerable difficulty of breathing, and pain across the epigastrium. A loud and harsh systolic murmur was audible over the upper part of the sternum, and in the præcordia, and no second sound could be detected. The difficulty of breathing and the epigastric pain increased, and he became the subject of double pneumonia, under which he sank in about three weeks after he entered the hospital. The left ventricle of the heart was somewhat hypertrophied and dilated, and the aortic valves were very extensively diseased.

The contiguous sides of the right and posterior valves were united so as to produce one large valve, imperfectly divided on its upper surface, and the posterior and left valves were also partially adherent. The fusion of the valves was evidently of very old date, and was most probably congenital. At the base, and rather to the left side of the right valve, there was a small aperture, leading into a sac situated in the substance of the septum of the ventricles, which formed a slight protrusion into the right auriculo-ventricular aperture. A second and larger aperture, leading into the same sac, was situated in the space between the right and posterior valves, and a communication also existed between the sac and the right sinus of Valsalva, but this was probably the result of decomposition after death. The sac was of sufficient size to lodge a hazel-nut, and was lined by a distinct membrane, but it did not contain any laminated coagula. There were vegetations of recent date on the aortic and mitral valves, and on the endocardium of the left ventricle. Dr. Peacock regarded the case as one of congenital malformation of the aortic valves, and he supposed that at the time the slight rheumatic symptoms occurred, some weeks before the admission of the patient into the hospital, the valves had become the seat of endocarditis, and thus the obstruction at the aortic orifice, originally only slight, became much aggravated, and probably led to the formation of the small aneurism. Cases very similar, in several respects, have been placed on record by Dr. Hope and Dr. Thurnam, and more recently by Dr. Todd.

Dr. PEACOCK, 21st of October, 1851.

14.—*Obstructive and Regurgitant Disease of the Aortic Orifice.*

This specimen was removed from a female aged thirty-three, who first came under Dr. Peacock's care, at St. Thomas' Hospital, in May, 1850. She stated that she had been first seized with the symptoms under which she laboured when in an advanced stage of pregnancy six months before ; and that she had never had rheumatism, inflammation of the chest, or any other disease to which her illness could be ascribed. She suffered from palpitation, great difficulty of breathing, and a severe pain in the epigastrium, extending thence to the spine, and down the left arm. A loud sys-

tolie murmur was heard over the upper part of the sternum, and this was succeeded by an imperfect second sound, terminated by a diastolic murmur, which was most distinct at the lower part of the sternum. While in the hospital she improved, so as to be able to resume her usual avocations, and Dr. Peacock did not see her again for some months. She then applied at the hospital as an out-patient, and stated that she had been pretty well till she had again become pregnant, and her breathing was then extremely difficult. She died about two months ago, three or four days after her confinement. The heart was found very large, and the left ventricle especially was much hypertrophied and dilated. The aortic orifice was considerably diminished in capacity, the outlet measuring in circumference only twenty-two French lines ; and, at this point, there was a very considerable deposit of athomatous material under the lining membrane. The inlet of the orifice was relatively large, measuring thirty-one lines. The valves, were diseased ; the left and posterior valves being much thickened, and their sacs very shallow ; while the right valve, together with the corresponding sinus of Valsalva, had undergone considerable dilatation, and presented, at its most dependent part, an orifice by which a column of fluid freely regurgitated from the aorta into the left ventricle. The case afforded a good example of one of the modes in which alterations in the relative capacity of the inlet and outlet of the aortic orifice operate upon the valves, so as to occasion their incompetency.

Dr. PEACOCK, 21st of October, 1851.

15.—*Diseased and Malformed Aortic Valves.*

A butler aged sixty, was admitted into St. Thomas' Hospital, under the care of Dr. Bennett, on the 30th of September. For six months he had been the subject of diarrhoea and other symptoms of functional derangement of the digestive system. The last week he had had cough. He was thin and haggard in look. He referred all his uneasiness to the epigastrium and belly, which was swollen, but no fluctuation could be detected. The respiration was quiet, but he had cough, attended by tenacious, slightly sanguineous sputa ; the skin was soft and cool ; the pulse very feeble, somewhat

quickenèd, and the tongue thickly coated with a moist brown fur. The resonance of the chest was much impaired on the right side, posteriorly below the scapula, and anteriorly beneath the clavicle; there was general deficiency of respiratory murmur, with small crepitation here and there. Subsequently the dulness increased very much, and the sputa became much more abundant and sanguineous, preserving the same tenacious character. He continued, however, to complain almost entirely of the uneasiness of the belly, and the respiration was never laboured nor much quickened. The heart's action was not attended by any bruit, nor, except very occasionally, was there any irregularity. The extent of cardiac dulness was considerably increased.

Post-mortem examination.—The heart was much enlarged; the left ventricle thickened, dilated, and distended with coagulum. Besides the more ordinary coagula, there were entangled amongst the columnæ carneæ numerous small semi-organized clots, some of which were softened internally into a puriform fluid. The aortic valves were only two in number, and much diseased. The most anterior was extensively ossified, especially about its free margin, which, from one extremity to the other, formed a nodulated mass of bony matter about a quarter of an inch in thickness. It was perfectly rigid, and blocked up one half the aortic orifice; the openings of the two coronary arteries were placed above this valve. The posterior valve was ossified, but to a less extent, the greatest amount being at the base, where were several large nodulated masses. The valve could move slightly, and was evidently capable of closing the orifice, though not of flapping back against the aorta, in which direction it could only move so far as to leave a narrow chink for the passage of blood. In the angle between the two valves to the right side was a small rudimentary third valve. The walls of the right ventricle were thicker than natural, and its cavity distended with coagulum. The auricles also were filled with coagulum. All the valves, except the aortic, were healthy. The only other morbid appearances worthy of notice were found in the lungs. These were very emphysematous, and contained large masses of pulmonary apoplexy.

Dr. RISON BENNETT, 21st of October, 1851.

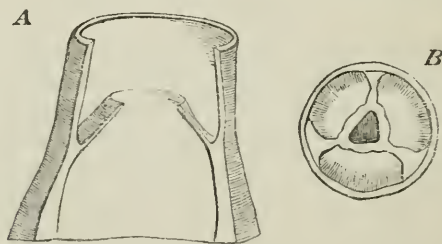
Dr. W. T. Gairdner observed, in reference to this case, that he was convinced, from an examination of various specimens in different museums, of disease affecting so called congenital malformed aortic valves, that the presence of two in the place of three valves, in many of the cases, was due to disease and not to malformation, the disease being so situated as to separate from the walls of the aorta the conjoined attachment of two valves which then constitute but one large deformed valve. A similar malformation may result from accidental injury, as illustrated in a case reported by Dr. Quain, in the first volume of the Society's "Transactions." In progress of time, the traces of the original injury in these cases are, as it were, blotted out, partly by the cicatrization of the arterial wall, and partly by the increasing deformity of the valves, which become contracted and thickened. In many of the preparations, he (Dr. Gairdner) had found traces of the ulceration sufficiently distinct; in others they were less evident, amounting merely to a small white scar, situated midway between the two insertions of the larger valve; in a third series, no such evidence of laceration could be found, and he was willing to admit that some of these were probably real instances of congenital malformation. Most of these cases are examples of very old disease, in which the traces sought for, if they ever existed, might have disappeared. On the other hand, the congenital malformation usually presents (as remarked by Dr. Peacock) distinct traces of a smaller third valve, which is of course absent from those malformations which result from disease.

Report on this and other Cases of Malformation of the Aortic Valves. — The specimen exhibited by Dr. Bennett affords an example of the least frequent form of malformation by defect of the aortic valves. The valves are only two in number, and have interposed between them a small sac, forming the rudiment of a third. The circumference of the aortic orifice measures thirty-six French lines, and, of the two valves, that situated anteriorly measures sixteen lines in width; the other, or posterior, measures eighteen lines, and the small sac is two lines in width and three in depth. Both coronary arteries arise from the same sinus of Valsalva, that corresponding with the anterior valve, and the two

vessels are much closer together than usual, being only twelve lines apart. From these observations it would appear, that the small sac must be regarded as the analogue of the right semi-lunar valve, the development of which, and of the corresponding portion of the circumference of the aorta has been arrested, so that neither has the valve assumed its proper dimensions, nor acquired its natural relations to the coronary artery.

From having had my attention directed to this case, I have been led to examine the various specimens of malformation of the semi-lunar valves of the aorta and pulmonary artery, contained in the museums of the Royal College of Surgeons, St. Thomas', St. Bartholomew's and Guy's Hospitals, and in my own collection, and the cases of which I have taken notes amount to fifty in number. Of these, forty-one are specimens of defective, and nine of excessive development. Of the forty-one cases, in seventeen the valves have subsequently become the seat of such extensive disease, that their original condition cannot be easily or clearly ascertained, but of the remaining twenty-four, with the exception of three or four, which are so placed that they cannot be fully seen, all afford evidence that the orifices had originally been provided with three distinct valves.

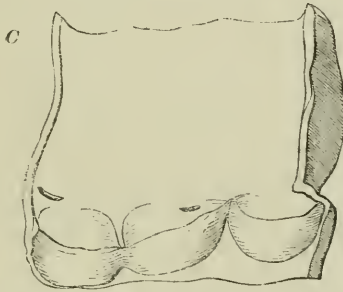
1. In some of the cases the aperture is defended by a single valve, forming a diaphragm, protruded forwards in the course of the circulation so as to assume a funnel shape, and which displays on its upper side three distinct septa or fræna, dividing



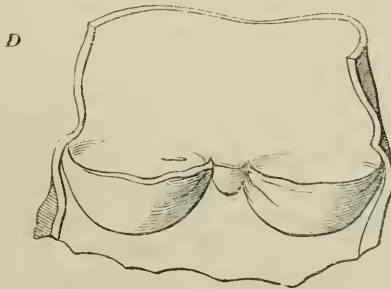
the same number of sacs, indicating its former divisions into three separate valves. This condition, though not often seen at the aortic orifice, is not infrequent at the pulmonic aperture. In the

preceding diagram, Fig. *A* shows this condition of the valves, as seen from the front when divided; in Fig. *B* the united valves are seen from above.

2. In a second, and by far the more frequent form of malformation, there exist only two valves, and the defect in the number is apparently due to the adhesion of the contiguous sides of two of the valves, so that, in the process of development, they have become blended into one; the original separation being, however, still indicated by the disproportionate size of the united valve, by the existence of a septum dividing it more or less completely on the upper or aortic side, and generally also by a slight sulcus running across the ventricular aspect of the valve, from its attached margin to the free edge, and terminating in a small notch, Fig. *C*.



3. Of the third form, that in which the original triple condition of the valves is indicated by a small rudimentary valve inter-



posed between the two others, Dr. Bennett's case affords the only example which I have seen, Fig. *D*.

In addition to these forms of malformation, cases do occasionally occur, in which the aortic orifice is found to be provided with only two valves ; the deficiency being, however, occasioned by the adhesion of two of the valves together from disease after birth, and the subsequent ulceration or atrophy of the septum so formed, or by the breaking down of the angle of attachment of two of the valves. Of the former description, a preparation in the Museum of Guy's Hospital appears to afford an instance ; and the latter condition existed in a specimen exhibited by Dr. R. Quain at the first meeting of the Society. In repeating that all the cases which I have examined, presented some sufficient proof of the originally triple form of the valves, I do not wish to extend the inference too far, and to deny that cases may occur in which no such evidence can be detected. For if, as we frequently see, especially when the defect is at the pulmonic orifice and co-exists with other malformations, the two valves may be nearly of equal size, and the indications of the former division of one of them may be only traceable on very careful examination, or if, when a rudimentary valve exists, it may be so small and imperfect as in the case exhibited by Dr. Bennett, we can readily understand that in some cases all traces of the original condition of the valves may disappear, though the mechanism of the malformation may have been precisely similar.

The term malformation is, however, as strictly applicable to the former class of cases as to the latter.

Of the forty-one cases of defect in the number of the valves, in nine the malformation existed at the pulmonic orifice, and in thirty-two at the aortic. In one case there were only two valves, both at the aortic and pulmonic apertures.

Defect in the number of the pulmonic valves, is generally attended with other serious malformations ; and consequently, is rarely seen except in young persons. When, on the contrary, the aortic valves are deficient in number, it is comparatively rare to find other co-existent malformation, and the persons in whom it is found are generally adults. This difference is explained by the greater relative importance of the pulmonic orifice during foetal life. No material deviation from the healthy state can then occur without the natural development of other parts of the

heart being interfered with ; for, if there be any obstruction, or if the orifice be incapable of adapting itself to the increasing current of blood which it is required to transmit, those channels necessarily remain permanently open which are natural only at the earlier periods of foetal life. The aortic orifice, on the contrary, is comparatively unemployed during foetal existence ; and this, though it may conduce to the occurrence of cohesion of the valves, renders that condition of much less importance, so far as the development of the rest of the organ is concerned. When, however, the valves are defective at either orifice, the malformation, though unconnected with any other imperfection in the heart, is a powerful predisponent to disease. Of the forty-one cases referred to, seventeen presented very aggravated disease of the valves, and, in very few of the others, could they be regarded as strictly healthy.

I have before stated, that of the fifty cases of malformation of the semi-lunar valves which I have examined, nine were examples of excessive development. Of these, eight were cases in which the pulmonic valves were in excess, and in one only was there more than the natural number of valves at the aortic orifice.

1. In some cases the excess of the number of valves seems to be due to the division of one of them into two—such divided valves being smaller in size than the others.

2. In other cases there are three valves of nearly equal size, with a smaller supplementary valve interposed between two of them.

3. Occasionally the aperture is provided with four valves, gradually decreasing in size ; and

4. In the other cases, there may be four valves of nearly equal size and natural form.

In the first two forms of malformation by excess, it is not unfrequently found that the division between the two portions of the one valve is not complete, or that the smaller supplementary valve communicates by an opening with one of the others : and it may be supposed, that the excess in the number of the valves is due to the free fold of one of the valves having become adherent to the side of the aorta. In the other cases it is not easy to offer any satisfactory explanation, so long as we are so im-

perfectly acquainted with the mode in which the semilunar valves are developed as at present.

Dr. PEACOCK, *4th of November, 1851.*

16.—*Malformation of the Aortic Valves.*

This heart was removed from a child aged nine. The aortic orifice is guarded by two valves only. It offers a good example of the second form of malformation from defect of development, described by Dr. Peacock, in his excellent report on malformations of the semilunar valves lately presented to the Society. One of the two segments of the valve is considerably larger than the other. The corpus Arantii of this larger segment is twice the size of that of the smaller. A ridge is seen on the aortic side of the same segment dividing it internally into two shallow pouches. Neither segment is opaque or thickened; and, excepting the malformation, they are healthy in appearance. The foramen ovale is more patent than is usual in a child of this age; but the opening is oblique, and probably no blood passed through it during life. In other particulars the heart is healthy.

Dr. W. JENNER, *2nd of December, 1851.*

17.—*Case of commencing Dilatation of one of the Segments of the Aortic Valve.*

The subject of this diseased valve, aged thirty-three years, died in St. George's Hospital, of pneumonia and bronchitis, never having suffered from rheumatism, or other important previous disease. During life a loud and double murmur at the base of the heart, attended by a jerking pulse, attracted attention. Evident symptoms of hypertrophy also existed. After death the root of the aorta was found to present patches of atheroma, and the middle flap of the aortic valve was greatly attenuated, and presented a small pouch-like projection, looking towards the ventricle, and filled by a coagulum of fibrine and blood. This appeared to be the early condition of such pouches as have been, on a previous occasion, shown to the society in connection with the mitral valve. The angles of this flap were attached on a lower level than those of the contiguous flaps, and were greatly thick-

ened, having evidently been torn from their attachments by atheromatoid ulceration at a former period. This condition of the valve had obviously permitted the amount of regurgitation necessary for the production of the hypertrophy before mentioned. The kidneys were diseased to but a slight extent.

Dr. OGLE, *3rd of February, 1852.*

18. — *Diseased Aortic Valves.*

The specimen had been removed from the body of a man, aged fifty-seven, who died of a low form of pleuropneumonia, after a few days' illness. About six weeks before his death he was attended by Mr. Pye Smith for an attack of influenza, and was then observed to have some irregularity in the action of the heart, and a slight systolic murmur was occasionally heard most distinctly over the aortic orifice. He informed Mr. Smith that, when a boy of about twelve years of age, while running he experienced a sudden sense of uneasiness in the region of the heart, and had subsequently suffered from some palpitation and dyspnoea on active exertion, but not at other times.

The heart displayed considerable hypertrophy of the left ventricle, the walls of that cavity being near the base, ten French lines in thickness. The right ventricle was also hypertrophied and dilated, and the heart was covered by a considerable deposit of fat. The aortic valves were only two in number; the left valve measured fourteen French lines in width; and the other, which corresponded to the right and posterior segments, measured twenty lines, giving a total circumference to the orifice of thirty-four lines, which, considering the size of the organ, was somewhat small. The valves were considerably thickened and indurated, and presented an irregular surface, but were not the seat of much recent exudation. The larger of the two valves was imperfectly divided by a firm ridge on the upper or aortic side, so as to mark its former separation into two distinct valves, and to produce two imperfect sinuses of Valsalva, the posterior of which was considerably dilated. There was much atheromatous deposit on the free fold of the mitral valve, and beneath the lining membrane of the aorta.

Dr. Peacock stated that Mr. Smith thought it probable the union of the right and posterior valves might have resulted from endocarditis at the time when the man first felt the inconvenience from running in early life. In this opinion, however, Dr. Peacock was not disposed entirely to concur; while he regarded the condition of the valves as caused by the fusion of the contiguous margins of the two valves from inflammation, he thought this had most probably occurred during the last periods of fetal life, and that, at the period when he suffered from running, some slight injury had been sustained by the previously malformed valves.

Dr. Peacock further remarked in reference to an observation made by Dr. Quain as to the possibility of the lesion in the particular case before the Society, being the result of an injury to the valves during the effort of running, when the symptoms were first observed, rather than a congenital deficiency, that he was acquainted with the cases referred to by Dr. Quain, but, as he had stated at a former meeting of the Society, he did not regard the condition of the semilunar valves, in cases like that under examination, as at all frequently due to the breaking down of the angle of attachment of the valves, and the consequent blending of two of the curtains into one. Such ruptures he believed to be of very rare occurrence, while the semilunar valves were very frequently deficient in number. Did the deficiency depend on the cause assigned by Dr. Quain, the recent evidences of such injury should occur much more frequently than they do. The valves of the pulmonary artery are found deficient in number as well as those of the aorta, and in the most complete form the change is almost wholly confined to the pulmonic valves, whereas, were it the result of injury, it is not easy to understand how the pulmonic valves should be affected at all. In the case under discussion, the breaking down of the angle of attachment, had it occurred, must have been complete, yet it could scarcely be supposed that so serious an injury should have been productive of such trivial symptoms. It seemed more reasonable to conclude that the injury sustained had been only slight, yet sufficiently severe to interfere with the function of the previously imperfectly formed valves. The circumstance that no symptoms of defect in the heart had been manifested before the age of twelve

years, did not afford any proof that the valves were originally well-formed : such a condition of the valvular apparatus was not unfrequently found in young persons who had never presented any signs of disease, and who died from accident or other causes, wholly unconnected with the state of the heart. Indeed, this peculiar condition was very unimportant in itself, though it entailed a predisposition to valvular disease in after life. It was strong evidence that the cohesion of the valves occurred during intra-uterine life, that it is so frequently found in very young infants, and is so often associated with other forms of undoubted malformation. The opinion which he had expressed, Dr. Peacock admitted was open to the objections made by Dr. Hare, *viz.*, that the cohesion of two valves may be the result of an original malformation. It was, however, confirmatory of the view which he took, *viz.* that the cohesion was the result of inflammation, that the condition was so constantly associated with thickening and induration of the valves and adjacent parts, and that it affected, to the greatest extent, the valves of the pulmonary artery, which, from the more active function they fulfil during foetal existence, would be most exposed to the causes of inflammation. The changes produced in the condition of the valves during foetal life, so exactly corresponded with the known effects of endocarditis in adults, that it was natural to regard their causes as identical. In the more complicated cases of malformation there was generally some marked deviation from the natural condition which might be regarded as primary, and to which all the others would be traced as necessary results. This primary change frequently consisted in the partial or complete occlusion of one of the orifices, and the condition of the obstructing part might be regarded as due to inflammation.

Dr. PEACOCK for Mr. E. PYE SMITH, 6th of April, 1852.

19.—*Diseased Aortic Valves, with general Hypertrophy of the Heart.*

J. C. D., aged thirty-six (a boiler-maker), was admitted into St. Thomas' Hospital, under Dr. Barker's care, on the 20th of April, 1852. He first complained of symptoms of cardiac disease six months before death ; these were dyspnoea, palpita-

tion, anxiety, and a tendency to syncope, which occurred several times in the first two months. He had not fainted since Christmas, but had often felt as if about to faint; slight œdema of hands and feet was noticed at times. On admission he had general bronchitis, which disappeared after cupping, &c. The impulse of the heart was very strong, and there was extended dulness on percussion. The pulse was very feeble; over the aortic valves was a faint, but very distinct systolic bruit; on many occasions no second sound could be heard, but a slight blowing sound was audible occasionally. A loud systolic bruit was heard an inch below and to the right of the nipple. The distress and anxiety were very great, and for three days before death he was very restless, and at times delirious. Forty-eight hours before, there were no signs of pneumonia, or of consolidation of the lung. He died on the 28th of April.

Post-mortem examination.—There was no recent pericardial disease, but the surface of the heart presented a number of opaque patches, the result of old inflammation.

The heart was greatly increased in size, all its parts apparently being nearly proportionately hypertrophied; it weighed, when empty of blood, 25 ounces, 4 drachms avoirdupois. The walls of the left ventricle were an inch in thickness at the base, and the cavity was greatly dilated. The aortic valves were much diseased, and altogether incompetent, as shown by allowing a column of water to fall upon them. The right valve was considerably thickened; in the neighbourhood of its angles it had become adherent (pinned down as it were) to the aorta in such a manner that its base, instead of being lunated, approximated to a straight line, so that the valve was rendered useless, and was capable of flapping with almost equal facility in either direction; this loss of function was increased to some extent by the position of the thickening, which was confined chiefly to the central and free part of the valve. The posterior valve was somewhat thickened, but apparently competent. The anterior one was in some measure imperfect, its free edge being thickened and contracted. The surface of the endocardium immediately below the aortic valves, was thickened and rough; this roughness was limited inferiorly at a distance of half an inch from the valves, by a cic-

trix-like band of fibrous tissue, which was attached transversely to the muscular parietes of the ventricle, extending round from one angle of the anterior curtain of the mitral valve to the other, thus producing a second contraction somewhat analogous to a valve in the ventricle, immediately below the aortic valves. The mitral valve was a little thickened at its free edge, but otherwise healthy. The walls of the right ventricle were much hypertrophied, measuring between one third and one fourth of an inch in thickness; the cavity was much dilated. The valves on this side were healthy. The walls both of the right and left auricles were decidedly thicker than natural, and their cavities were dilated. All the cavities of the heart were filled with ordinary coloured clot, and in the right auricle, connected with the muscoli pectinati, were numerous small semi-organized coagula.

Both pleuræ presented adhesions, but chiefly the right. The two lower lobes of the right lung were solid and soft; they broke down readily on pressure, and yielded a large amount of thick chocolate-coloured fluid; they had somewhat of a gangrenous odor. The upper lobe was congested and œdematous. There was no disease of any other organ.

It may be remarked that the disease of the heart was evidently of much older date than the patient's account would lead one to believe, and probably arose in some inflammatory attack years before his death; the changes were not those of decay—atheromatous or earthy degeneration. With respect to the loud systolic bruit heard below the nipple; it could scarcely have proceeded from the mitral valve, since *that*, to all appearances, was healthy. Could it have been caused, then, by the constriction below the aortic valves? I may here call attention to a similar constriction occurring in the right ventricle, in a heart exhibited at the society, by Dr. R. Bennett, early in the present session (see No. 7, p. 273).

Dr. BRISTOWE, 4th of May, 1852.

20.—*Malformation of the Pulmonary Semilunar Valves.*

This heart was removed from an adult female. It offers an example of the second form of malformation from excess of development, as described by Dr. Peacock, in his report lately pre-

sented to the society (see p. 291). Four semilunar valves are seated at the orifice of the pulmonary artery ; the circumference of the artery measures three and one-eighth inches. Three of the four valves measure one inch each along their free margin ; the fourth, placed between two of the larger, measures only one-eighth of an inch. The small, or supplementary valve, resembles the others in all particulars but size ; its base is crescentic ; and at the centre of its free margin is a corpus Arantii. There are no communications between the pouch of this valve and those of the neighbouring valves. There is no opacity or other disease of the valve, excepting some reticulation ; and the heart and other valves are healthy. Dr. W. JENNER, 20th of January, 1852.

21.—*Peculiar disposition of the Large Vessels, producing a Tumour at the Root of the Neck.*

The heart, large vessels, and lungs of a woman aged eighty-eight, who for some years before her death had a pulsating tumour, of the size of an orange, just above the right clavicle, in the situation of the carotid, were submitted to the Society. The swelling had not of late increased in size, and caused no inconvenience ; the woman died from natural decay. The vessels arising from the aorta were elongated and considerably dilated ; and the tumor, which was considered before death to be aneurismal, consisted of a reduplication of the right common carotid, and of indurated cellular tissue round it. The interior of the vessels was highly vascular, and there was considerable atheromatous deposit, with slight lesion in various parts of the inner coat.

Mr. COULSON, 6th of January, 1852.

22.—*Rupture of the Brachial Artery ten days after Compound Dislocation of the Elbow-joint.*

From a woman aged twenty-six, who was admitted into the Middlesex Hospital, Dec. 17th, 1851, for a compound dislocation of the elbow-joint, caused by her being thrown from a pony-chaise. The upper ends of both bones of the fore-arm were displaced behind the lower head of the humerus. The wound was

in the line of the anterior flexure of the joint ; it was three inches long ; and contained between its edges some frothy blood ; in its middle the brachial artery was seen pulsating, and the pulse was distinctly felt at the wrist. Both the tendinous expansion of the biceps inserted into the fascia of the fore-arm and the fibres of the brachialis anticus were torn through ; so that the finger could be passed along the whole front of the lower head of the humerus in contact with the articular cartilages. After reducing the dislocation, which was easily effected by combined elongation and flexion of the arm, the joint was secured, lying on its inside, in a flexed position upon a bent splint. For five days there was a copious discharge of thin pus from the wound ; but after that, the matter was healthy and moderate in quantity, and the case appeared to be proceeding favourably. On the 10th day the patient got up to use the chamber utensil ; and in returning to bed, a sudden and profuse flow of blood took place from a small opening in the granulations of the wound, over the main artery. Being at the hour of visit, Mr. Shaw saw the patient immediately ; but the bleeding had ceased spontaneously, about eight ounces of blood having been lost. The pulse was perceptible at the wrist. A tourniquet was loosely applied : a pupil was set to watch ; frequently repeated doses of gallic acid, and cold applications were ordered. During the following twenty hours there was no recurrence of the bleeding ; and the pulse at the wrist was distinctly felt at different times : there then happened a slight oozing of blood, which soon ceased of itself. But in five hours more, when the patient was lying quietly, a sudden gush of blood, like the first, took place ; and in a few seconds, she lost a large amount of blood. Upon this it was deemed proper to amputate the arm. On examining the removed limb, a clot of blood, which from its firmness was considered to have been effused at the time of the accident, occupied the space left by the torn insertion of the brachialis anticus ; the brachial artery was imbedded in the superficial part of this clot ; and owing to the plastic matter which imperfectly united the surfaces of the wound, extending into the clot, the latter adhered with great tenacity to the coats of the artery. When the vessel was properly exposed, there was brought into

view a laceration of its walls, on its posterior side : this consisted of a longitudinal rent, a third of an inch long, with two other shorter ones at each end, in a transverse direction ; the whole forming a shutter-like flap, capable of being opened and closed. It appeared that the tear in the artery must have been produced during the dislocation, by the lower head of the humerus being thrust out of the wound, carrying the vessel before it, so as to stretch it violently : it is probable that the internal and middle coats gave way at that time, and that the external coat, protected by its elasticity, remained entire : when the suppuration in the wound had existed for some time, it is to be supposed that the outer coat became softened and weakened, so as to have yielded to the force of the circulation when the patient exerted herself in getting out of bed. It is further probable, that the bleeding did not return, after the first outbreak, for the period of twenty-five hours, even although the pulse was perceptible at the wrist, owing to the shutter-like flap in the side of the artery becoming closed, and being kept shut, by the firm adhesion of the surrounding clot of blood to the walls. Since the operation the case has proceeded favourably.

Mr. SHAW, 6th of January, 1852.

23.—*Aneurism of the Aorta : with a Description of the Morbid Anatomy of the Recurrent Nerve compressed by it.*

A rather healthy looking man, aged about thirty-five, had suffered from cough and dyspnœa of a somewhat paroxysmal character during four months. One day, while engaged in his ordinary avocation of hawking vegetables in the streets, and exerting his voice to the utmost, he felt something give way in his wind-pipe, at the same time that his voice was reduced to a hoarse whisper. He entered King's College Hospital. His chief symptoms were a hoarse stridulous murmur, which accompanied the breathing, but was much more marked during inspiration ; a partial loss of voice ; its musical tones and timbre being greatly diminished, while articulation was perfect ; and dyspnœa, with cough. The two latter symptoms were occasionally much increased, so as to constitute a kind of fit, which occurred, on an

average, three or four times daily, and ended by a very difficult expectoration of frothy mucus, attended with temporary relief. Little affected by different plans of treatment, he remained some weeks in the hospital, and, about ten days after leaving it at his own request, he suddenly brought up about a quart of venous-looking blood, sank, and expired. Through the kindness of the gentleman attending the case, Dr. Brinton made the *post-mortem* examination. The lungs were healthy, but they were rendered pie-bald, by a kind of lobular pulmonary apoplexy, evidently due to blood effused in the air-tubes and vesicles. At the upper part of the thorax, behind the left border of the manubrium, was an aneurism. It was about the size of a small hen's egg; it communicated by an aperture the size of a fourpenny piece with the arch of the aorta behind and between the left carotid and subclavian, but rather nearer the latter than the former. It lay against the trachea on its front and left side, from its tenth to its fifteenth rings. To its left was the œsophagus, in front was the left subclavian artery, and the left carotid occupied its right margin. On slitting open the sac of the aneurism, it was found to be occupied below by a soft, recent coagulum, which at its upper and anterior part merged into the ordinary laminated fibrine of an aneurism. The eleventh, twelfth, and thirteenth rings of the trachea were laid bare in the sac of the aneurism, and were apparently somewhat diminished in size by a process of absorption. On the inside of the trachea, corresponding to this situation, the mucous membrane was thickened, protruded, and ulcerated, so as to leave an irregular transverse opening of about half an inch between the twelfth and thirteenth rings, and two other extremely small apertures between the eleventh and twelfth. The left recurrent nerve passed vertically down the left side of the aneurism, in the substance of whose wall it lay for about an inch and a half. In fact, it might almost be said to occupy the cavity of the aneurism for this distance, being only severed from it by an extremely thin membranous lamina, apparently the remains of its sheath. A small segment of this exposed surface of the nerve carefully torn up, and shielded from pressure as much as possible, was placed under the field of the microscope side by side with a precisely similar seg-

ment of the opposite and healthy nerve. The tubes of the latter offered the ordinary double outline of the "white substance of Schwann," and had their usual amount of transparency. But the constituent tubules of the nerve occupying the aneurismal sac presented a marked contrast in all these respects. Its neurilemma was filled by a yellow, refractile, fatty-looking matter, composed of innumerable granules, of greater or smaller size. Here and there these granules imitated the white substance of Schwann, by taking a peripheric position just within the neurilemma: in some places the largest granules had even a double outline; and in others the approximation was rendered still closer by the granules merging into wavy, peripheric laminae, having a shape exactly like what may be sometimes produced by great pressure in the human subject, or what is often seen in the nerves of other animals when treated with sundry re-agents. The less exposed parts of the nerve presented similar but less marked appearances. The laryngeal muscles of the same side were paler and firmer than the opposite ones. Their sarcolemma was occupied by darker contents, and their transverse striæ much less distinct.

Dr. Brinton remarked, that, although compression had evidently obtained in this left recurrent nerve, and might produce appearances somewhat similar to those detailed, yet it alone was probably insufficient to account for the contrast. Every care had been taken to compare the two nerves—the healthy and diseased—side by side, under absolutely similar circumstances. The neurilemma of the tubes of each was perfect, their form unaltered, but their colour and structure much affected.

In reply to a question of the President, Dr. Brinton said, that he had spoken very briefly of the symptoms. The diagnosis had been ulceration of the trachea. From the imperfect loss of voice, the reference of the patient's sensations, and the point of greatest intensity of the sound, it had been allotted to the trachea at some distance from the larynx. The man's general symptoms, and very careful stethoscopy, seemed to deny the existence of tubercles in the lungs, and thus of its being phthisis, with great and early ulceration of the larger air-tube. But, while the possibility of an aneurism was fully recognised, the loud roaring of

the tracheal sound, and the almost convulsive movements of the tube, completely baffled all attempts to affirm or deny its actual existence.

Dr. BRINTON, 2nd of December, 1851.

24.—*Small Aortic Aneurism opening by minute Orifices.*

A female, aged thirty-four, having arrived within a few days of her ninth month of pregnancy without any previous indisposition or illness, was suddenly attacked in the night with difficulty of breathing, accompanied with general languor and loss of power; having the appearance, as described by her family, as if she were fainting; these symptoms became gradually more aggravated for an hour, when she died. On examining her body some days after death, all the organs were found perfectly healthy; the bag of the pericardium contained about a pound of dark clotted blood; when examined *in situ* no lesion or rupture could be discovered in the heart or large vessels, but a number of thread-like bands of fibrous adhesion an inch in length passed between a small aneurismal dilatation near the origin of the vessel, and the left auricle. The aorta within the pericardium had a mottled dark appearance: a longitudinal incision into this vessel exposed the internal lining of the ascending portion of a dull reddish colour, and studded with atheromatous deposits in an early stage; the internal and middle coats of the aneurism were destroyed to the extent of a fourpenny piece by ulceration, which had perforated the walls by three small openings only sufficiently large to permit the passage of a couple of bristles, and which had given exit to the bleeding into the pericardium, so causing the slow and gradual death. The aortic valves, endocardial lining, and structures of the heart were healthy.

Mr. OBRÉ, 20th of January, 1852.

25.—*Abdominal Aneurism, bursting through the Diaphragm into the Chest.*

The following history of the case is from the pen of Mr. Vickers, from whose patient the preparation was removed.

A police-constable, aged forty-six, a stout good-looking man,

formerly a cavalry-soldier in India, now six years in the London police force, complained in November 1851, of a severe pain in the left hypochondrium, extending from the eleventh and twelfth ribs obliquely towards the umbilicus; about eighteen months previously, in attempting to quell an Irish row, he was strained in the loins over a bannister, and in the same spot he had received a severe kick in 1848; since the last injury he has at times been obliged to yield to the left side in walking. For three months previously to his death he was confined to bed, his usual position being on the back, with the knees drawn up, obliged to place his hands under the loins when coughing: the pain being most intense, and resembling "scalding water poured inside him." Exploration of the abdomen gave no indication of organic disease. He was treated by opiates. At times the left lobe of the liver appeared enlarged, also the spleen; but, in fact, the state of no organ pointed to a satisfactory diagnosis, nor accounted for the continued and extreme pain. The various abdominal organs continued to perform their functions naturally; the urine at times was loaded with lithates, and the testicles occasionally were retracted. The case continued in this unsatisfactory state, developing no fresh symptoms, until the 7th of February, when a pulsating tumor suddenly presented over the spaces of the ninth, tenth, and eleventh ribs on the left side, within half an inch of the spine, measuring three inches and three quarters vertically by two and a half transversely; it appeared to make its way through those ribs, to be painless and elastic, and it communicated no bruit. The character of the disease now became manifest, and nothing could be hoped for but a speedy dissolution to relieve him from his continued and intense suffering. The temperature of the lower limbs was lessened, but there was no œdema; he survived three weeks after the tumor was detected, and expired suddenly in an agony of pain.

The body, which was examined the day after death, was a good deal emaciated; on examining the lower and back part of the chest, the aneurismal tumor was found to have lost its elasticity and become flaccid; the covering integument was natural. On opening the thorax, the left pleural cavity was found filled with fluid and coagulated blood, measuring, it was supposed, about two quarts,

the coagulated portion being sufficient to fill two hands when held together. The lung on that side being compressed by the fluid ; the diaphragm and covering pleura were perforated about their median points on the same side by an irregular split or tear an inch and an eighth in length, which was occupied by a clot of blood. Lungs healthy. Heart small, and free from disease, its left ventricle covered with fat. The abdominal organs were found generally healthy, liver slightly fatty, its tissues easily broken down ; the kidneys enlarged ; in the cortical structure of the right a small cyst contained glairy fluid. The lining membrane of the arch of the aorta was studded with a theomatous deposit, more so where it gave off its large branches ; (under the microscope this deposit was found to consist of a large proportion of fat granules), the same deposit was distributed over the thoracic portion. At the point where the aorta passed between the crura of the diaphragm into the abdomen, there was an oval opening in the posterior part of the artery, one inch and an eighth in length by one inch in breadth, surrounded by bony deposits ; this opening communicated with a large aneurismal tumor, which separated the vessel from the spine, and extended on the right side as far as the posterior third of the three inferior ribs, on the inner surface of which it lay, and on the left side as far as the centre of the corresponding ribs ; perpendicularly it was bounded by the diaphragm (to which it was attached on both sides) and the ligamentum arcuatum. The coverings of the aneurism were formed by a fibrous structure internally, apparently the fibrous elastic coat of the artery, and the diaphragm with its pleural covering, which, except posteriorly, surrounded the swelling. The aneurism having formed immediately as the vessel was passing the aortic opening in the diaphragm, it appears to have passed laterally under the diaphragmatic attachments to the spine and four lower ribs on either side ; so taking that muscle for its chief covering and support, posteriorly the swelling pressed on the eleventh and twelfth dorsal vertebræ ; the body of the former was half absorbed from the pressure. The two last ribs on the left side were extensively destroyed near their attachments to the spine, their heads, necks, and intercostal muscles being quite absorbed, so permitting the

fractured ribs to be loose in the cavity of the tumor, allowing the blood to extend posteriorly, and to be defended only by the serratus posticus inferior and other flat muscles of this region with the integument, the other muscular structures having been destroyed. In the cavity external to the ribs the fibrous lining of the tumor could not be traced; the left segment of the aneurism was filled with dark coagulated blood; in the right there was laminated fibrous deposit. The circumference of the swelling measured twenty inches, and there were bony deposits in the aorta near its bifurcation. Mr. OBRÉ, 2nd of March, 1852.

26.—*Aneurism of the Abdominal Aorta, associated with Fatty Degeneration of the Heart, and of the small Blood-vessels of the Cerebellum.*

A woman, aged twenty-nine, pale, weakly, and of irregular habits, was admitted into the Westminster Hospital, under the care of Mr. Lynn, on the 8th of March, for a scalp-wound about an inch in length, situated over the left parietal bone, near the vertex of the skull. It had been inflicted with a poker on the previous evening, but no immediately alarming effects were consequent on the blow. She was carried into the ward, having partially lost the use of her legs on her way to the Hospital, but she still retained sensation in them. She was conscious, but extremely restless, and complained of pain and pricking in her legs. Soon after her admission the restlessness increased, and she discharged some blood from the bowels. Towards evening the *right* leg became quite paralysed and its sensation lost; its temperature, as well as that of the fellow extremity, sank considerably; later she became unrestrainably noisy, and there were strong convulsions of the right arm and leg. Afterwards she fell into a deep sleep, which lapsed into coma and death.

Mr. Barlow was present at the examination of the body, which was conducted by Mr. Halford, the house-surgeon, with great care and minuteness.

The skull was bare in the situation of the wound, but there was no trace whatever of fracture. On removing the cranium, nothing was found which could be traced conclusively to the

effects of the blow. There was some serum in the meshes of the pia mater, and the substance of the brain seemed moister than usual, but it could not be said to be in a softened state; on making some sections of the cerebellum, the corpus dentatum, and a slight margin of the surrounding tissues, were found in a state of most obvious *ramollissement*; the affected spot was in a condition of tumefaction, such as Rokitansky has described as being common in softened parts of brains. On observing a section common to the softened and adjoining tissue, the former was distinctly seen rising above the surface. On some of the small vessels in the immediate neighbourhood of the softened structure being examined microscopically by Dr. Basham and Mr. Barlow, one or two vessels of very minute diameter, small venous branches apparently, appeared in a state of obvious fatty degeneration; dilute hydrochloric acid had no effect in dissolving the granules. Dr. Charles Shearman had reported on them that "in vessels of the size of $\frac{1}{3000}$ th of an inch, there was, certainly, degeneration of the tissue; the granules were larger than usual, some measuring as much as $\frac{1}{9000}$ th of an inch, or even more; they were chiefly congregated around the nuclei of the vessels." The softening was extremely limited, the degeneration not extreme; but yet it was distinct and extremely interesting from the state of the heart, with which it was associated. The large vessels at the base of the brain looked healthy. The heart was flabby, and fawn-coloured, presenting, with the exception of a few red spots on the columnæ carneæ, the characteristic aspect of degeneration. The aorta was very slightly atheromatous; the coronary arteries and their larger branches were quite pervious, so far as they could be traced, and free from disease. The heart-fibres were examined with the microscope by Dr. Basham, Dr. R. Quain, and the narrator, and found in a general state of fatty degeneration. The change was most marked in the left auricle around some small sanguineous effusions, which had escaped, probably, from minute vessels in a state of the same degeneration as that of the fibres. (Mr. Barlow had formerly seen in a fatty heart, a small blood-vessel of $\frac{1}{1700}$ th of an inch in diameter, in a state of fatty degeneration; it was found and shown to him by Dr. Charles Shearman; there was also found a like condition of the large and small arteries of the brain.)

An aneurism of the abdominal aorta, of which there seems to have been no symptoms during life, was detected ; it was as big as a lemon, and not unlike one in general shape ; it was situated opposite the last dorsal and first lumbar vertebræ, but had not, apparently, caused much absorption of these bones. It seemed formed entirely at the expense of the posterior wall of the vessel, the anterior seeming healthy. The cœliac axis and superior mesenteric artery were seen arising from the latter, and were not in the least obstructed. So completely full of coagulium was the sac, that the blood latterly must have flowed onwards much as though no aneurism had existed.

There was considerable ecchymosis in the muscles at the back of the neck, and a good deal of congestion about the arches of the vertebræ in that situation, both external and internal to them ; but the cord and its membranes were healthy.

Mr. Barlow said that he had brought the case before the Society, not on account of the accident or its symptoms, but from the pathological interest attaching to the circumstance of the association of the abdominal aneurism, the fatty heart, and the softened brain, which had all originated, as could be hardly doubted, in the same form of degeneration.

So much evidence of premature decay was, looking to the age of the patient, very remarkable. No arcus senilis was seen, but the cornea had not been examined by the microscope to see how far it was free from fat-granules. It should be added, that the kidneys were in a state of granular degeneration.

Mr. W. F. BARLOW, 16th of March, 1852.

27.—*Aneurism of the descending Aorta which caused death by bursting into the left Bronchus.*

This preparation was taken from a woman, aged thirty-six, who came under the care of Dr. Fuller at St. George's Hospital, on the 3rd of February, 1852. She was complaining of constant pain on the left side of the chest with severe cough, scanty expectoration, occasional hæmoptysis, and some emaciation. These symptoms were of three months' duration. She stated that she had recently experienced an attack of pleurisy on the left side for

which she had been twice salivated and repeatedly blistered. This statement was confirmed by the marks of several blisters on the left side of the chest, and by the presence of ægophony at the seat of pain. It was evident, however, that no great amount of effusion remained, for the left chest, though not so resonant on percussion as the right, yielded a fair amount of resonance except quite at the base of the lung. Respiration was sometimes quite inaudible in any part of the lung : at others a faint respiratory murmur was perceptible. The respiration on the right side was exaggerated. The heart's action was regular, its impulse and sounds normal. The pulse was somewhat weak but regular. Whilst conversing with Dr. Fuller, on the fourth occasion of his seeing her, she coughed once or twice, then suddenly jumped up, and in a moment blood was gushing in torrents from her mouth and nostrils. She expired in less than three minutes.

After death it was ascertained from her husband that she had suffered more or less from pain on the left side of the chest above two years, and had been harassed occasionally by cough, though not to any material extent. During the last year she had been unable to lie on her left side, but had nevertheless enjoyed average health up to about three months before her death, when the attack of inflammation on the left side of the chest supervened.

Post-mortem examination.—The lungs on either side of the chest were partially adherent to the walls by bands of adhesions, which on the right side were old and firm ; and on the left more recent and easily broken down. In the left pleural cavity was a small quantity of turbid serum. The left lung was crepitant but not so perfectly as in health. On section it presented a singularly spotted appearance which resulted from the smaller bronchial ramifications being gorged with dark-coloured coagula of blood. In one part of the lower lobe was a faint reddish yellow mass, which was either a decolorized clot of old extravasation, or the remains of an old pneumonia. The right lung protruded forwards and extended quite over to the left side of the chest. On section it presented the same sort of mottled appearance as did the left lung, though not so strongly marked. The larger bronchi were filled with dark-coloured fluid blood. The pericardium con-

tained about seven ounces of perfectly clear straw-coloured serum, in which was floating a mass of jelly-like lymph. There was not the slightest injection or roughness of the serous lining of the pericardium. The heart weighed $8\frac{1}{2}$ ounces; its muscular walls and its valves were quite healthy. It was examined under the microscope, and no fat existed within its fibres. A very slight atheromatous deposit was found at the root of the aorta, but with this exception the whole of the ascending portion, and the arch of the aorta were quite healthy. At about one inch below the arch, the descending aorta was greatly diseased. Its coats were thickened and rendered rigid and brittle by a copious deposit of atheroma; and at one spot, where they had given way, a small aneurismal pouch was formed. It was about the size of a walnut, and was completely filled with old coagula of decolorized fibrin. It was found to have pressed upon the left bronchus, the coats of which had ulcerated through, and at the spot where it had come in contact with and caused pressure upon the bronchus, its own walls had also given way, so that the old coagula which it contained, formed the only obstacle to the egress of the blood. At this spot it ultimately burst. The liver was healthy, and weighed two pounds and seven ounces. The spleen was healthy and weighed $5\frac{1}{2}$ ounces. The kidneys were healthy. The body of the uterus was healthy, but the os uteri was very congested and ulcerated, and presented on its surface one or two bright red granulations which were covered by a thick purulent fluid. The ovaries were of the natural size, but contained one or two small cysts, in which was a perfectly clear fluid. Dr. FULLER, 20th of April, 1852.

28.—*Dilatation of the ascending and transverse portions of the Arch of the Aorta.*

A gentleman, aged sixty-two, who had been a sufferer for many years from symptoms of heart-disease, presented a fortnight previous to his death (from suicide) the following symptoms. He had intense sternal pain passing into the left super- and infra-clavicular regions, and thence into the axilla, which he described as agonizing. There was no murmur perceptible in the heart or aorta in front, but a distinct systolic short superficial weak

murmur was heard in the course of the aorta just below the inferior angle of the left scapula.

No prominence or impulse was visible in the sterno-clavicular region, nor any thrill below or above the clavicles. On percussion a dulness was detected in the left inter-scapular region, and slightly so in the right. There was also dulness about the first and second costal cartilages. The respiration was deficient all over the left side of the chest, and in the left scapular region was particularly jerking, and on its inner margin of a very short blowing quality. After death the sternum was found absorbed on its left side near the attachment of the second rib, this process having been caused by the pressure of a large aneurism of the aorta, which was formed by the dilatation of its coats, beginning immediately the vessel left the ventricle, the sinus of Morgagni taking part in the expansion, and continuing as far as the termination of the transverse portion of the arch: the origins of the vessels passing off from it being also enlarged, more particularly that of the innominate; the ascending portion expanding to the size of a small melon; its inner surface was studded with fatty deposits; the walls of the heart were thinner than natural, its internal structure healthy. The left bronchus was pressed on anteriorly, being diminished in its calibre by one-half; the left lung was much contracted and firm to the feel, as if it had been in disuse for some time, and was firmly attached to the ribs.

Mr. OBRÉ, 18th of May, 1852.

DISEASES, &c., OF THE ORGANS OF DIGESTION.

1.—*Ulcerated Cancerous Tumor of the Right Anterior Arch of the Fauces.*

This preparation was taken from a female, aged fifty-three, who was admitted into the Middlesex Hospital on the 25th of November, and died on the 9th of December, 1851. Being unaccompanied by friends, and the act of speaking giving pain, the history of the complaint was incomplete; but she stated that the disease in her throat had existed for a year. A smooth, glossy tumour, of a pale-red colour, of firm consistence, and about the size of a large

walnut, occupied the space between the posterior half of the palate on the right side, and the back part of the side of the tongue, on which it pressed. Several lymphatic glands under the ear were enlarged, hard, and moveable. She hawked up during the day a considerable quantity of dirty, greyish matter mixed with mucus and saliva. In sleeping, she required to be in the sitting posture; she preferred soft, pultaceous food, as being most easily swallowed; she was greatly emaciated. Her abdomen was large; but, as she complained only of pain in her right side, the state of the abdominal viscera was not particularly examined. She died with symptoms of pleurisy. On examining the throat, the tumor was found inseparably connected with the hard and soft palate, from the outside to near the uvula. In front, the surface was entire; but towards the median line, and posteriorly, there was extensive ulceration. One border of the ulcer reached downwards to the back of the tongue, while the other descended more backwards, and further down, to the superior aperture of the larynx, by the side of the epiglottis. The tonsil, which was sound, was seen behind. The base of the ulcer as well as the indurated and enlarged cervical glands, were distinctly of cancerous structure. In the mucous membrane of the upper part of the trachea, a few small cancerous tubercles were observed. Both lungs were studded throughout their greater part with cancerous tumors, varying from the size of a hazelnut to that of a chestnut, and in some places running into each other. Near the œsophageal end of the stomach, three or four cancerous tubercles, of the size of split almonds, adhered to the smaller omentum. Nowhere else were cancerous tumors found. There were signs of recent inflammation of the pleura on the right side. The spleen was greatly enlarged, extending from the highest part of the right hypochondrium to Poupart's ligament, and it weighed four pounds twelve ounces.

Mr. SHAW, 16th of December, 1851.

2.—*Ulceration of the Œsophagus, perforating the Pericardium.*

E. S., aged twenty-five, a housemaid, admitted into St. Mary's Hospital, under the care of Dr. Chambers, January 23rd, 1852.

Of pale complexion, conformation good ; but she appears weak and reduced ; her countenance is anxious. General health has been good, with the exception of an attack of rheumatism twelve months since. She cannot account in any way for her present illness ; catamenia have always appeared regularly ; she was in the enjoyment of good health till three months since, when she began to suffer from nausea, and frequently to vomit after her meals ; this state continued for a month, when, in addition, she began to experience difficulty in swallowing, which has increased up to the time of her admission ; she also complained of pain between the shoulders of an aching, digging character, with occasional pain in the epigastrium. On her swallowing a small piece of dry bread, she said it felt as if it had lodged at the top of the sternum and to the right side, where she fancied there was a lump (to which place she pointed). The harder and drier the substance, so much more the difficulty in swallowing. Pulse 80, tongue slightly furred, slight abrasion at the back of the pharynx, tonsils enlarged. Skin cool. Sleep indifferent. Bowels regular, and urine natural. Matters vomited very frothy, offensive, and sour. These were examined by the microscope, but neither at this nor on subsequent trials, was anything, beyond the food taken, detected. The case being diagnosed as one of ulceration of the œsophagus, she was treated accordingly. On auscultating the chest, the respiratory murmur on the right was heard deficient, though loud and coarse.; this continued throughout. The symptoms continued much the same up to March 2nd, when she began to be teased by a constant cough. The next morning on being called to her, I found her pulseless, with lividity of the lips, and leaden hue of countenance ; a short time after which she sank. Her chest was examined both on March the 2nd and the following morning, when a few scattered rhonchi were heard, but not any friction sound, facts which can be reconciled with the *post-mortem* appearances by recollecting the feebleness of the heart's action, and the presence of a certain amount of fluid and air, separating the two layers of pericardium.

Post-mortem examination fifteen hours after death. Body muscular and well formed ; slight blueness and lividity of the lips and forehead. Sections showed a small amount of adipose tissue. On

opening the abdomen, the stomach was seen to be placed in a vertical position, its pyloric end being an inch below the anterior superior spinous process of the ilium. In the chest the pericardium appeared full and distended; on puncturing it there was an escape of air, followed by a thin, yellow, sour-smelling fluid (which was acid); the visceral and pericardial serous membranes were covered with a deposit of fibrin; on raising up the heart there was seen a small opening at a point corresponding to the reflexion of the pericardium, from the pulmonary vessels to the left auricle, through which, by pressing on the stomach, fluid of the same character as that before described exuded. After having removed the heart, great vessels, lungs, and œsophagus, the latter was laid open; it was seen that the entire circumference of that part of the tube, extending from the bifurcation of the trachea to half an inch above the diaphragm, was the seat of simple ulceration, without any contraction of the canal. From this a probe passed obliquely through the opening before described into the sac of the pericardium; a little lower down there was another perforation of the œsophagus, which opened into a small ulcerated spot at the root of the left lung, separated from the cavity of the chest by surrounding adhesions, which were easily broken down. There were slight adhesions between the pericardium and the left lung, and a good deal of ecchymosis at the cardiac extremity of the stomach. Over the right bronchial tube there was a small cluster of glands, which being firmly adherent to it, somewhat compressed its calibre. On a careful examination of the other organs nothing abnormal was discovered. It ought to be remarked that, on account of the nature of the disease, a probang was not used.

I believe this to be the only case on record in which ulceration of the œsophagus has so terminated. Dr. Parkes, at a former meeting, laid before this society* a case in which the pericardium had been perforated through the œsophagus, when a juggler was performing the feat of "swallowing a sword." Another point of interest in this case is the difference in respiration on the two sides, which rather baffled the diagnosis, and was accounted for on the autopsy in a way that could hardly have been expected.

Mr. J. W. TROTTER, 16th of March, 1852.

* Transactions of the Society, vol. ii. p. 40.

3.—*Colloid Disease of the Abdominal Viscera.*

M. C., aged forty-nine, a native of the Isle of Man; unmarried; of a reserved and taciturn disposition; has lived as servant in London for the last twenty years. She said that she had enjoyed pretty good health till within the last twelve months, but a female friend, with whom she has latterly resided, states, that during a period of eight years, whilst she was living with her as a fellow-servant, her breath was always so offensive, that none of the other servants could be prevailed upon to sleep with her. About three years ago she felt rather unwell, and sought medical advice. Her menstruation ceased about eighteen months before her death.

In about six months after this her abdomen began to enlarge, but she never complained of pain or of being ill, and felt annoyed if any one mentioned the subject or suggested that she ought to seek advice. Mr. Clarke of Notting Hill, to whom Dr. Quain expressed himself as indebted for an opportunity of seeing the case, and for the notes of its history, saw her on Nov. 13th, in consequence of her being seized with an attack of bronchitis. She then had a cadaverous and emaciated appearance, and on examining the chest the ordinary signs of bronchitis were found. The sounds of the heart were rough and grating. The pulse was 130, small and rather hard. Thus it continued till a week or so before her death, when it gradually became feeble and fell to 80.

During the progress of her illness she was repeatedly sick, but this symptom was attributed to the cough, and partly also to the expectorant medicine which she was taking. On examining her abdomen it was found considerably enlarged, with distinct fluctuation, and in each iliac region there existed a firm, tense, elastic tumor, more distinct on the left than the right side; therefore Mr. Clarke looked on the case as one of bronchitis supervening upon ovarian dropsy with effusion into the cavity of the peritoneum.

During the first ten or twelve days of her illness the bowels performed their functions tolerably well, but about this time a clear slimy substance like white of egg, or albumen, passed from the rectum, and seemed to take the place of the usual excretion;

the like substance, apparently, was found at the same time in the urine, so that a rupture or perforation of one of the ovarian cysts was thought to have occurred, and that it was discharging its contents into the bladder and rectum. This, however, only continued for three or four days, and then ceased.

The urine throughout was scanty, occasionally cloudy from mucus, &c., but no deposit occurred either of lithates or of phosphates, nor, when tested for albumen, could any traces of it be found. Sp. gr. 116°. No drink nor diuretic medicine administered seemed capable of increasing the quantity secreted to more than ten or twelve ounces. The abdominal effusion increased considerably during the last week or two of her life, and her legs became œdematous. Her mind was clear throughout, and to the last she maintained her reserved and uncommunicative disposition, and even two days before her death upbraided her friend and nurse with directing attention to the abdominal disease, which she evidently wished to conceal.

Post-mortem examination.—The body generally was thin and presented a cachectic appearance. There was nothing very remarkable in the thoracic cavity, save evidence of the presence of bronchitis, which had existed during life, and there was some roughness of the pericardium on the anterior surface of the heart. The abdominal cavity exhibited a mass of disease, of which it is difficult to give a concise and clear description.* *Cysts*, varying in size, in the numbers collected in masses, and in the appearance of their contents studded the peritoneum and invested nearly all the principal viscera. The largest cysts, some of them being larger than the largest hen's egg, filled the pelvic cavity surrounding the uterus and the ovaries. An immense number of cysts, some not larger than pins' heads, covered the surface of the liver, and formed a solid firm mass on the upper surface of the organ with similar cysts and surrounding tissue on the under surface of the diaphragm. The omentum drawn up towards the stomach, was greatly thickened, covered with cysts on the surface, and studded with others throughout its substance. The sub-

* In addition to the appearances above described, there was abundant evidence of recent and extensive acute peritonitis, and there was granular disease of the left kidney.

stance of the spleen, when cut across, presented several masses of cysts of considerable size. The liver and kidneys did not contain any. The peritoneum lining the abdominal walls was studded with cysts, in size from a pin-head to a cherry. The cysts were situated apparently beneath the subperitoneal tissue.

Contents of the cysts.—The cysts everywhere contained a viscid gelatinous substance, which, in some, could not be distinguished in its general colour, transparency, and appearance from transparent calves' feet jelly. In others the substance showed a pale pearly white but transparent colour, in other cysts (mixed with the most jelly-like) the substance had a creamy appearance. In a few examples there was a peculiar reddish, and in others a greenish tinge. This substance was everywhere remarkably tough, viscid, and elastic.

Structure of the cysts.—The vascular walls of the cysts were in some specimens thick though generally semi-transparent, and in several instances very thin. In those situations where the cysts were small and aggregated together, a section gave the appearance of bands or trabeculae, forming by their crossing cells or loculi, which contained this peculiar jelly-like substance. When this was removed by washing or otherwise, the section presented a strikingly honey-comb appearance. The walls of these cysts or cells, when examined with the microscope, were found composed of very distinct fibres, arranged concentrically around them. Many small cysts, invisible to the naked eye, were by the aid of the microscope shown to be present in the walls or septa of the larger aggregated masses. The contents of the cysts appeared to be separated from the fibrous stroma, constituting the cyst-wall by a layer composed of delicate epithelium-like cells. There were scarcely any other cells visible amongst the fibres in the parts examined. The fibres in the stroma were rendered very distinct by acetic acid.

Microscopic and Chemical characters of the gelatinous contents of the Cysts.—This substance when taken from some parts, and placed under the microscope, was transparent and nearly invisible. From other situations it presented the appearance of being traversed by delicate fibres. These fibre-like appearances in some instances might have been caused by the pressure of the glasses on the

elastic substance between them, but in others the *fibres*, which were also rendered more distinct by the action of acetic acid, seemed too regularly and distinctly formed to be thus produced. *Cells* were found in various proportions in different parts of the same and in different cysts. These cells varied in size from $\frac{1}{4000}$ th to $\frac{1}{1000}$ th of an inch in diameter. They were generally circular in form, but many were irregular, and a large number were oval and elongated. In some cases these cells were arranged longitudinally, as if in lines or rows; in other instances several were collected together, as if forming a flat delicate membrane. The cells generally contained a number of minute granules—very few contained nuclei. The more deeply situated cysts showed the greatest number of these cells. There were numerous granules diffused throughout the substance, and the creamy appearance previously described was found to be due to the presence of an immense number of granules most closely resembling minute oil-globules, but which were shown by Dr. Jenner to be soluble in hydrochloric acid, and hence to be composed of earthy matter, probably of phosphate of lime. The granular cells previously described, were rendered more distinct by tincture of iodine, by alum, and by bichloride of mercury. These cells were probably the *debris* of the epithelial lining of the cysts. A portion of the transparent substance, when boiled in water for half an hour, swelled to twice its former size, but retained its transparency. Tincture of galls produced scarcely any effect on the supernatant fluid. The like substance, when treated with nitrate of silver, became of an opaque pearly white colour; an appearance caused by numerous fine granules precipitated by the large quantity of earthy salts which this substance evidently contained. Mr. D. Campbell examined this substance chemically,—and found it to be “almost *sui generis*. It has some of the properties of a protein compound, contains nitrogen and sulphur—a very small proportion of albuminate of soda, and of insoluble albumen.”

It is worth remarking that this gelatinous substance exhibits little tendency to putrefaction.

Dr. Quain observed, that both Dr. Jenner, who would also lay the result of his examination of the specimen before the Society,

and himself, viewing this case in its isolated form, had independently arrived at the conclusion, that it was questionable how far the term cancer was applicable to this deposit; it was safer, in the present state of our knowledge, to call it colloid disease.

Dr. R. QUAIN, 20th of January, 1852.

Additional Specimens from the same Case.—Dr. Jenner exhibited a wax model of the spleen, taken by Mr. Tuson immediately after the removal of that organ from the body; the spleen itself containing, in its interior, large masses of the colloid matter, totally unconnected with its capsule; also a portion of the liver and its capsule, a piece of the omentum, and the contents of the pelvis. All these preparations belonged to University College Museum.

The contents of the pelvis consisted of the uterus, with a small portion of the vagina annexed, the posterior wall of the bladder, a part of the rectum, and an immense number of cysts in which the uterus and its appendages were so completely buried, that a considerable amount of dissection was required before their condition could be demonstrated.

The whole mass removed was about the size of an adult head. The cysts varied in size from a pin-head to a cricket-ball; their walls were dense and tough, those of the larger cysts as much as a quarter of an inch in thickness, and highly vascular. The cysts seated above the fundus of the uterus were covered on their upper surface by peritoneum, which membrane was there coated with a layer of apparently recently-effused lymph (the granular or croupose variety). The inner surface of the walls of the larger cysts was highly vascular, and in one there was a small clot of blood lying between the cyst-wall and the contents, the latter being dyed red to a slight extent. Many of the larger cysts were multilocular, the septa passing inwards to a variable extent; in one the aperture of communication between two large loculi just admitted the point of the little finger.

The contents of the cysts were a substance resembling soft size in colour, consistence and transparency; it was, however, more tenacious than size, pulling out into strings like thick mucus. Here and there this colloid matter had a cloudy aspect, and was

at places streaked with opaque whitish lines. Next the walls of some of the cysts was a little opaque whitish creamy-looking substance, having the tenacity (though less marked) of the colloid matter.

Microscopical Examination of the Contents of the above-described Cysts.—*Creamy-looking Matter.*—(a) spherical granules refracting light strongly, the majority about $\frac{1}{10000}$ of an inch ; some, however, being $\frac{1}{4000}$ of an inch in diameter. So far as the microscopical characters were concerned, these little bodies could not be distinguished from olein ;—(b) irregularly-shaped masses, varying in diameter from $\frac{1}{2000}$ to $\frac{1}{250}$ of an inch. These little masses were made up of granules resembling those just described (a), and larger particles having an imperfectly crystalline appearance. Hydrochloric acid dissolved, without effervescence, in the majority of cases, but now and then with the evolution of a bubble of gas, the spherical granules (a) and the little masses (b) leaving, however, an animal basis for each granule, or at least for the far larger number ; in many cases this animal basis was a nucleated cell measuring, after the action of the acid, from $\frac{1}{2000}$ to $\frac{1}{1000}$ of an inch in diameter, and the nucleus about $\frac{1}{4000}$. Some of these cells were oval, others spherical. Ether exerted no action on the little protein particles left after the action of the hydrochloric acid.

The Colloid Matter from the Interior of the Cysts was generally homogeneous and transparent. The cloudy appearance and the opaque streaks were caused by the presence of yellowish granules and globules, refracting light strongly, similar to those previously described (a), and here and there were a few crystals of cholesterine. Crystals of the triple phosphate were about as numerous ; a few nucleated cells, resembling those found in the creamy matter, were also present. Hydrochloric acid dissolved the triple phosphates, and almost all the granules and globules ; a few of the latter, however, remained unchanged by the acid—these were probably olein. A few bubbles of gas escaped from the action of the acid. In the more transparent parts of the colloid matter were a few nucleated cells, varying in size from $\frac{1}{1000}$ to $\frac{1}{1000}$ of an inch in diameter, the nuclei measuring from $\frac{1}{4000}$ to $\frac{1}{8000}$ of an inch in diameter. Much more numerous than these nucleated cells were oval bodies, their long axis measuring from $\frac{1}{400}$ to $\frac{1}{1000}$ of an

inch, their breadth being generally about half their width. These little masses were arranged in a somewhat linear series, the long axis of all lying in the same direction; here and there they overlapped each other, forming little groups. At first sight, these bodies appeared to be non-nucleated cells; on account of the tenacity of the peculiar substance in which they were imbedded, reagents were brought to act on them with difficulty, and their separation was impossible; subsequently, however, I satisfied myself fully that they were perfectly soluble in ether, and, consequently, that they were little masses of fatty matter.

The homogeneous colloid matter being pressed between two pieces of glass, under the microscope, assumed an imperfectly fibrous appearance. Acetic acid rendered it more opaque, and gave to it a strongly-marked fibrous aspect. Here and there these apparent fibres might be seen to melt or spread out into a homogeneous membrane, and the more these apparent fibres were separated from each other, the less perfect they seemed. When steeped in acetic acid for a short time, the colloid matter became *very* tough and highly elastic. Hydrochloric acid made it opaque.

Cyst Walls.—The inner surface of the larger cysts yielded, when scraped, nucleated cells similar to those seen in the creamy-looking substance, and in the interior of the colloid matter. One of the largest measured $\frac{1}{100}$ by $\frac{1}{333}$ of an inch. The fibrous part of the cyst wall consisted of white fibrous tissue, which swelled up and became transparent on the addition of acetic acid, losing, at the same time, its fibrous appearance. After the action of the acid, yellow elastic tissue was perceptible.

Uterus.—Although pressed on all sides by the cysts containing the colloid matter, and flattened and otherwise distorted so that it was dissected out with difficulty, no colloid substance was found in any part of its walls. The os uteri was free from ulceration, and perfectly smooth. The parts of the vagina, as well as the bladder, preserved, were abnormally vascular.

The part of the *omentum* exhibited was one inch and a-half in thickness. It was composed of cells varying in size from a pin-head to a bean; some of these communicated with each other. When cut across, some of the cells were divided so as to expose a flat wall on the cut surface. The walls of the majority of the

cells were of some thickness, opaque and white, with a simple lens; further subdivisions, by more delicate septa, were seen. A few minute vessels, filled with blood, were seen coursing between the septa, and the open mouth of one vessel of considerable size was perceptible. A part of the capsule of the *liver* was also placed on the table. It was greatly thickened, opaque and highly vascular, and closely studded with minute cysts, varying in size from a pin-head to a pea. The colloid matter contained in the cyst, had at places the consistence of very stiff glue. Several incisions were made in the liver while *in situ*; no colloid matter was exposed. The organ was not removed from the body, and, consequently, its state was not accurately determined.

Dr. Jenner remarked, that the chief points of interest in the case, were :—

1st. The extent of the disease.

2nd. The presence of the colloid matter in the interior of the spleen.

3rd. The exemption of the uterus from the colloid deposit, although surrounded by it on every side.

4th. The close resemblance of the phosphate of lime-granules to olein.

5th. The close resemblance borne by the fat imbedded in the colloid matter to cells.

6th. The action of acetic acid on the homogeneous colloid matter.

7th. The appearance presented by the cut surface of the omentum.

Of the occurrence of colloid matter in the spleen, he believed there is no case on record; nor has, so far as he knew, the close resemblance—a resemblance so close that he could give no visible characters whereby the one may be distinguished from the other—between phosphate of lime and fat, been previously pointed out. He had now seen globules, which, judging by the eye alone, experienced microscopists pronounced to be oil, but which dissolved completely in hydrochloric acid, in many situations, *e.g.* in the substance of the walls of the minute vessels of the brain, in the kidney, &c. He regarded this as a fact of considerable importance. It occurred to him that the colloid matter

was poured out in the interior of the cysts, that these cysts were lined by epithelium, that the nucleated cells imbedded in the colloid matter were merely some of these epithelium scales, and that it was in the interior of these cells and their nuclei chiefly that the phosphate of lime was deposited. Of the existence of true fibres in the colloid matter he was very doubtful; the appearance of fibres seemed to him to have been produced by the pressure of the glass on a tenacious substance, and by the action of the acetic acid.

Dr. JENNER, 20th of January, 1852.

4.—*Sections of two large masses of Hair and String from the Stomach and Duodenum.*

M. E. N., aged eighteen, came under Dr. Blakely Brown's care on the 7th of August, 1849. She had always been delicate, but more so during the last year. She appeared sickly and childish. The bowels acted irregularly, and were generally relaxed. The catamenia had appeared only once, about ten months before the above date. Her appetite was variable, and she frequently vomited after meals. For several months she had been suffering from a tumor, apparently about the size of a large orange, situated in the epigastric region, which projected slightly, but was not painful on gentle pressure; it was apparently solid, and very slightly moveable. It had increased very gradually. She complained principally of general debility, and of the inconvenience from, and of the occasional pain about, the tumor. Under treatment she improved for about six weeks. On the 30th of September she complained of much pain in the region of the tumor, which had come on after a severe attack of vomiting. This was relieved for a short time, but recurred the next day; soon afterwards she became collapsed and died.

Post-mortem examination.—The cavity of the peritoneum contained several ounces of purulent serum, and the general surface of the intestines afforded evidence of recent peritonitis; there were also some older adhesions. On opening the stomach and intestine, the masses of hair and string exhibited were found in them. That from the stomach (see Plate VI.) is moulded to the shape of that viscus, which was much dilated; it occupied

the larger portion of the greater extremity, a narrowed part projecting into the pylorus; very little solid food could have been taken latterly into the stomach, and little else than fluid could have passed by this mass into the duodenum. The mass consisted chiefly of long black hair and pieces of string rolled up and matted together with ingesta. It measured, when dry, six inches in length, three and three-quarters in depth, and two and a half across; but was much larger and heavier when first removed. The second mass had taken the shape of the lower portion of the duodenum and commencement of the jejunum (see Plate VII.), which were considerably dilated. This mass consists of much less hair, but a very large proportion of string; it was fourteen inches in length, two and a half inches in depth, and two and a quarter broad in the thickest part. From the history of the case previously to the attendance of Dr. Blakely Brown, it appears that she had been observed to put hairs into her mouth when only three or four years of age, but that her habits had not attracted any particular attention of late.

Mr. POLLOCK, 21st of October, 1851.

5.—*Sarcinæ from the Stomach of a Boy.*

The patient, aged fourteen, was admitted into St. George's Hospital for Bright's disease with peritonitis, on the 5th of November. On the 12th, the urine, being of a very high sp. gr. and highly albuminous, was given to Dr. Bence Jones for examination, and sarcinæ ventriculi were found to be present in it. This led to an examination of the matter which had been vomited, and sarcinæ in much greater quantity were found therein. As another specimen of urine did not contain any sarcinæ, and that found in the bladder and kidney after death was perfectly free from them, there could be little doubt that the specimen of urine which was first examined had been in some way mixed with vomited matter. On the 13th the patient died, and was examined by Dr. Ogle, who states, that there was cedema of the lower extremities; that both pleural cavities contained much yellow serum, more especially the left one; and on both lungs recent yellow fibrin existed. The lower lobes of both lungs were



Telford West, lith. ad nat.

Evans & West, del. Robt. Hartman, sculp.

Mr Pollock's case of a mass of hair & string from the Stomach.





Pollock's case of a mass of hair & string from the Duodenum.

Fig. 8. View of the mass of hair & string from the Duodenum.



non-crepitant, tough in consistence, and sank in water. On pressure, a quantity of brown-red dirty fluid escaped. In some of the subdivisions of the pulmonary artery distributed to the lower lobes, coagula of fibrin existed. The heart (excepting distended superficial veins) was healthy. The abdominal cavity contained about two pints of milky purulent fluid. The stomach was apparently healthy, and contained a quantity of olive-brown coloured fluid and solid substance, consisting chiefly of undigested food; and in this a number of sarcinæ existed, of both clear and granular character. Excepting slight injection of the duodenum, the intestines were all healthy. The kidneys were smooth, and externally apparently healthy, but a sectional surface showed a white yellowish deposit in the cortical part; and on microscopical examination, the epithelial cells of the cortical and pyramidal parts contained a considerable quantity of fat within them, but not to any very great extent, as did also the Malpighian bodies. The extratubular parenchymatous part, also, was much exaggerated in quantity. Kidneys weighed $11\frac{1}{2}$ ounces. In the pelves of both kidneys a peculiar thick dark yellow substance existed, consisting chiefly of fibrinous cysts and mucus; but no sarcinæ and no crystalline matter could be found.

Dr. BENCE JONES, 18th of November, 1851.

6.—*Hypertrophy of the Spleen.—Crystals in the substance of the Spleen; (Splenic Murmur).—Ulceration of the Colon.*

The individual from whom the specimens were removed was a male, aged fifty-six, porter to an upholsterer, and of regular habits; he had a rather large scrotal hernia. He consulted Dr. Hare in October, 1850, in consequence of having passed six small calculi during the preceding week. For three years before, he had at times observed that the urine was of a high colour, and deposited a dark orange-red coloured sediment, but never previously had he voided any calculi; those passed consisted of lithic acid. For two years previously, each summer and winter, he had suffered from diarrhœa, and he had only been free from an attack of it about a week before his visit. He took liquor potassæ. For some time he passed considerable numbers of mi-

nute lithic acid calculi, with lithic acid gravel : afterwards lithate of ammonia, in the form of small calculi ; and, lastly, had only an amorphous deposit of lithate of ammonia in the urine. It was several times tested for the presence of albumen, but none was at any time, during the whole of his illness, found in it. About the beginning of February, 1851, he first observed his ankles swollen, which, except for short periods, they continued to be more or less afterwards. About the commencement of June he felt a sensation of fulness or tightness in the abdomen ; he had experienced a similar sensation about a month previously ; at first he had felt it about the epigastrium, but since then he had experienced it more and more, and lower down in the abdomen : at the time he mentioned it, the sensation of fulness was referred principally to the umbilical region. On examining the abdomen, it was found to be prominent, rather barrel-shaped ; most prominent at the level of the umbilicus ; the right side was less tense than the left, and moved rather more during respiration : it was moderately tympanitic on percussion ; but the left side, from the level of the costal cartilages to the level of the crista ilii and forwards to the umbilicus, was dull and resisting, and a little painful on percussion, as was also the left posterolumbar region. He had never had ague, nor lived in a marshy district. A blister and some other remedies relieved him of the pain, and he suffered very little from this during the rest of his illness. He gradually became somewhat thinner, and his complexion paler, but the tumor did not appear to alter very materially in size or character. About the end of September he had become decidedly weaker, and, though he occasionally went out, he remained for the most part in bed ; he had been occasionally relaxed, and his feet had become more swollen, but there was no œdema of other parts of the body ; he was thinner ; his complexion had assumed a light olive tinge, with a shade of yellow, more marked in the face than elsewhere ; he felt thirsty and parched ; appetite not very good ; urine still generally contained some lithic acid or lithates, but in much smaller quantity than before. By percussion and palpation the extent of the tumor and its outline could be pretty accurately made out ; its right border passed from under the margins of the costal cartilages at a point an inch

and a half to the left of the ensiform cartilage, and thence, inclining to the right, extended downwards (passing about half an inch to the right of the umbilicus) to a point about an inch below the level of the crista ilii; hence the edge of the tumor inclined downwards and to the left till within two and a half inches of the symphysis pubis, where it turned to the left, and was lost in the iliac fossa at about an inch below the anterior superior spinous process; this border of the tumor was deeply notched at two points, the one a little above, and the other a little below the umbilicus. On pressing in the left lumbar region, at about four inches from the spine, a sharp edge of the tumor was also perceptible. The tumor was dull on percussion, and did not pulsate, but over the whole of it a distinct blowing murmur ("splenic murmur") was audible, somewhat rough in character, and most marked at the right border of the tumor about an inch and a half below the level of the ensiform cartilage. As he became thinner the edge of the tumor became more distinct, but the tumor itself appeared to remain undiminished in size till December 7th, two days before his death; it was then certainly somewhat smaller, but must have diminished most remarkably during the next two days, for the alteration not only attracted the attention of those who waited upon him, but when seen after death, the abdomen had become of a shape altogether different from what it had been previously. For two or three weeks he had had considerable and uncontrollable diarrhœa, which, towards the last, became excessive, and was the immediate cause of his death.

Post-mortem examination sixty-two hours after death.—Body a good deal emaciated; marked œdema of both feet and ankles, a little of the upper parts of the legs. Moderate emphysema of the whole of both lungs; a few only of the vesicles were the size of hemp-seed. Heart presented nothing unusual. The abdomen, instead of being full and prominent, as formerly, sank inwards from the cartilages of the ribs, so as to present from above downwards—from the ribs to the symphysis pubis—somewhat of a concavity. A large portion of the lower part of the left side of the abdomen, which had formerly been occupied by the tumor, was now resonant on percussion, while the tumor itself—the position

of which could no longer be detected by the eye—was to be felt occupying only the upper and outer part of the left side. The omentum was opaque, thickened, and the lower end of it alone formed the scrotal hernia, no intestine being contained therein. The mucous membrane of the colon was of a palish ash-grey colour; throughout its whole extent there were ulcerations, most of them varying in size from a hemp-seed to a split-pea; the margins very little, and, for the most part, not at all elevated; but the ulcerations presented rather the appearance of portions of the mucous membrane punched out, while the bottom of the ulcerations had a reticulated appearance; the ulcerations were rather more numerous in and near the caput coli than elsewhere. The liver was very much elongated, especially its left lobe; for, while the right lobe measured only six and a half inches transversely, the left one measured eight and a half inches; this was due, doubtless, to adhesion by false membrane having taken place between the under surface of the left lobe of the liver and the top of the spleen, so that the former had been thus singularly stretched by the enlargement of the latter. The spleen, though very much smaller than it had formerly been, measured ten inches in length, by five and an eighth in breadth, and two and an eighth in thickness, its weight being rather more than two pounds and three quarters; its surface was somewhat wrinkled, and at its upper part (about an inch from the top), there was a deep furrow, where a portion of the organ was doubled on the part below; its anterior edge was distinctly notched; at its upper extremity, besides its adhesions to the under surface of the liver, there were a few patches of old false membrane on its surface. Near the hilus there was a small *lien succenturiatus*, about the size of a pea. On section, the spleen was of a darkish red colour, with a purplish tint, and was moderately firm under pressure. Kidneys healthy, except that some of the apices of the cones contained lithic acid. Dr. Sieveking examined a portion of the spleen under the microscope, and found it to be chiefly composed of granular matter; he also discovered some crystals interspersed among the granular matter, and found that they were dissolved by acetic acid. Dr. Hare also subsequently saw them in another portion of the spleen; they were irregular in shape, though some approached a rhomboidal form, were

colourless, and the largest of them were from three to five times the diameter of a blood-disc in size.

Dr. C. J. HARE, 16th of December, 1851.

7.—*Examination of Three Specimens of Enlarged Spleen, presented at former Meetings.*

The cut surface of the spleen presented in Mr. Shaw's case (p. 316), exhibits an irregularly raised appearance, the greater part of it constituting elevations of a dull whitish colour, with intervening red streaks. The idea conveyed is, that the Malpighian bodies have become greatly hypertrophied, so as to encroach on the red pulp materially: many of them seemed to have fused together. Microscopic examination fully confirms the view above stated, showing that the whitish substance consists of pale, colourless, nuclear corpuscles, very closely resembling the normal corpuscles of the Malpighian bodies. The red pulp has almost disappeared; there is scarcely a trace of it; only a few vessels are seen moving between the hypertrophied Malpighian masses. In some parts a remarkable deposit of black pigment has taken place in the course of the vessels, so that they appear black to the naked eye; the pigment consists of various sized grains and granules. There were but very slight traces of the yellow matter, which Kölliker supposes to be derived from decomposing blood-globules, anywhere to be seen. A few glistening, highly-refracting, prismatic crystals were dispersed about. These were, probably, triple phosphate of ammonia and magnesia.

A second specimen was that presented by Dr. Hare (p. 329). A section shows a perfectly uniform smooth surface, of a rather light red colour, contrasting completely with the preceding; no elevations corresponding to the corpora Malpighiana are seen; it is only marked here and there by vessels and trabeculæ. It consists entirely of the usual elements of the red pulp, without any yellow corpuscles; but there are a very considerable number of largish crystals, which appear to be triple phosphate, as they dissolve readily in diluted muriatic acid.

The third specimen was given to the author by Dr. Sieveking. The person died of phthisis. This spleen was of an unusually

light-red colour. The sectional surface exhibited large circular spaces, of a semi-transparent aspect, separated from each other by more opaque bands. The circular spaces seem to correspond to the Malpighian corpuscles, and contain a quantity of rather highly-refracting matter, in the form of irregular fragments of homogeneous texture; the proper corpuscles of these bodies are atrophied, but few of them can be seen. The intervening opaque bands consist of the usual elements of the red pulp. The Malpighian tufts of the kidneys in this case contain an exactly similar matter to that occupying the place of the corpora Malpighiana in the spleen. None of this matter was observed in the liver. Rokitsky notices this condition of the spleen, and describes the deposit as much resembling bacon in consistence and appearance. He says, it often coincides with the analogous lardaceous infiltration of the liver, or with a similar affection of the kidney, which he regards as a variety of Bright's disease.

Dr. HANDFIELD JONES, *2nd of January, 1852.*

8. — *Great Hypertrophy of the Spleen; diseased Heart and Kidneys.*

H. H——, aged twenty-five, first came under the care of Dr. Hare, at University College Hospital in August, 1851. He was a weaver by trade, and had always resided in London. Had enjoyed good health, except having had acute rheumatism once.

Six months before admission he got wet, and had a cold and cough: a month after this time he for the first time felt some pain in the upper part of the abdomen; and it was from this period (five months before admission) that he dated his illness, for in consequence of the pain he had to leave off work, and was three times blistered. Shortly after this he observed his feet swelling, and in less than a month more he first remarked that the upper part of the abdomen was enlarged: this enlargement had continued to increase somewhat up to the time of his admission. Had suffered from palpitations, and also for three or four months from lumbar pains; his urine had been less in quantity than natural.

On admission he was pale; had no œdema of face but some of the ankles; gums bled readily on pressure; rather thirsty; appe-

tite good, but food caused a sensation of weight at the epigastrium. Abdomen somewhat barrel-shaped, rather prominent, but the middle and upper part of the left side somewhat more so than the right: on the left side of the abdomen there was considerable resistance to pressure from the edges of the cartilages downwards to one inch and a half below the level of the umbilicus; this part was also quite dull on percussion; this dull, resisting part (vertically below the nipple) measured six inches and a half downwards from the cartilages of the false ribs, and transversely (at a level one inch and a half above the umbilicus) six inches; there was also almost complete dulness on percussion over the lower part of the left side of the chest from the level of the nipple downwards. The limits of the dull and resisting part of the abdomen could be well and easily defined. The left postero-lumbar region was duller on percussion than the right, which was quite resonant. The apex of the heart beat at three quarters of an inch to the *left* of the nipple, and about one-fourth of an inch above its level; impulse strong; a murmur with both sounds at apex, and a double murmur also at the base; the murmurs at the base more marked than those at the apex; that accompanying the diastole still louder than the systolic one,—so much so, as entirely to replace the natural second sound. Urine passed in twenty-four hours was twenty ounces. It contained a large quantity of lithate of ammonia, and albumen to one-sixth of its bulk after standing twenty-four hours. He was cupped over the region of the tumor to seven ounces, with complete relief to the pain he had at the epigastrium, &c. He also took purgative doses of bitartrate of potassa, and the swelling of the ankles, and amount of albumen in urine, both diminished considerably. He left the hospital at his own request in a few days, but the size of the tumor remained unaltered.

Dr. Hare did not again see the patient during life; but at the end of January last he came under the care of Dr. Cogswell: he was then pale, suffered from palpitation and dyspnœa, and complained of distension of the abdomen; he had repeated attacks of epistaxis. Urine contained lithic acid and albumen; he died on the 23rd of February, having been previously much purged.

Post-mortem examination.—The body not much emaciated.

Skin pale, with very slight sallow tinge: a trace only of œdema of the ankles.

Lungs healthy. *Pericardium* partially adherent to the heart by false membrane of old date, over a space about the size of half-a-crown. *Heart* very considerably hypertrophied, and of large size, the walls of the left ventricle being especially thickened; edges of the mitral valves studded with largish vegetations of cartilaginous hardness. Aortic valves thicker than natural, and each one presenting large vegetations, projecting from its surface. The highest part of the *arch of the aorta* reached very nearly to the level of the top of the sternum; owing, probably, to the hypertrophy of the heart, and to the adhesion of the pericardium, the aorta was drawn rather more than natural to the left side; the arteria innominata arose close to the left carotid. Owing to these two circumstances the arteria innominata passed obliquely upwards, and to the right in front of the trachea at a short distance only below the cricoid cartilage.

As seen *in situ*, the liver, which was considerably enlarged, reached upwards to the level of the fourth rib; its left lobe hid from view the upper part of the spleen, but this viscus, exceedingly enlarged, projected downwards to within two inches and a half of the symphysis pubis. The *liver* was much larger than natural; its left lobe, which lay between the diaphragm and the spleen, was flattened out, and therefore relatively to the other parts of the viscus it was thinner than usual. The *spleen* was eleven inches and a half in length, by seven and a half at its point of greatest breadth, and three and an eighth in thickness; its right edge had a slight inclination forwards; its anterior surface was somewhat convex from side to side, but quite smooth, and of a purplish colour, except that at its upper and inner part there was a slightly yellowish thin deposit on its peritoneal coat, probably the remains of lymph effused there; and at the same part, but of more limited extent, there was some false membrane by which it was still united to the under surface of the liver: a deep fissure, extending three-fourths across the viscus, divided it into two unequal lobes; the edges of this fissure were coated with old false membrane. On section the spleen presented a moderately dark purple colour, the surface of the section being very uniform in

appearance, scarcely at all granular, the white septa or trabeculae being very slightly marked; consistence rather firm; at one part of the surface, over an area of three-fourths of an inch in diameter, the substance of the spleen was of a lighter colour, and was firmer than elsewhere; the difference in colour and consistence appeared due to a deposit of fibrin, which extended about three-fourths of an inch into the substance of the organ. Weight rather more than six pounds. Both *kidneys* considerably enlarged, substance easily broken, and mottled with yellowish and reddish brown tints. No ulceration in any part of the *large intestines*, nor in the last eighteen inches (the only part examined) of the *small intestines*, but a few of the solitary glands were a little enlarged. Dr. C. J. HARE, 2nd of March, 1852.

9.—*Unorganized Deposit in the Spleen.*

The specimen exhibited consisted of a spleen weighing seventeen ounces, of firm solid texture throughout, as if from the hardening of spirit. In its substance were three or four large patches of a yellowish-coloured deposit, having a slightly pink hue towards their central parts. These existed at the peripheral portions of the viscus, and penetrated to some extent into the interior. Moreover, the whole viscus was of a mottled colour, owing to an extensive infiltration of a lightish-coloured material, which gave to it its firm unyielding character. Examined by the microscope the deposits proved to consist of amorphous and granular matter, larger fatty granules with great numbers of small oval and elongated cells, having a nuclear appearance along with an admixture of what seemed to be the natural cells of the organ. No indications of ulterior development or organisation existed in the deposit. The investing fibrous capsule of the spleen was thickened and rendered opaque, having several tough bands of false membrane attaching it to contiguous parts; and on examination the lining of the splenic artery was seen to contain atheromic deposit.

The spleen was removed from the body of a man, aged forty-one, who died of pleurisy in connection with disease of the kidneys, which were much atrophied and granular, and contained

many cysts of the ordinary character. The larger vessels and the heart were found quite free from any disease.

It may be remarked, that the majority of instances of this lesion which have occurred at St. George's Hospital have been associated with a similar state of the kidneys, some being with, others without, either disease of the heart, or of the splenic arteries, &c.

Dr. OGLE, 16th of March, 1852.

10.—*Enlarged Spleen, excess of White Corpuscles in the Blood, Epistaxis, &c.*

J. D., aged thirty-seven, a soldier, subject to repeated attacks of liver disease, for which he got his discharge eight years ago, and since then a hawker and crier of vegetables, an occupation which has caused loss of voice, was seized suddenly with sickness, dyspnœa, tightness and swelling of the abdomen, and pain in the loins, whilst sitting dressing bricks at the water-side on the 1st of November. Œdema of the legs and ascites came on in a few days. He was stated to have had a valvular murmur at this time, but this had disappeared by the 24th, when I first saw him. Besides the above symptoms his urine was dark-coloured from the presence of blood, scanty, and albuminous.

The treatment consisted of cupping over the loins, which removed the pain. Elaterium occasionally, and an electuary composed of cream of tartar and extract of dandelion, &c., succeeded in relieving him, so that the œdema and ascites had almost disappeared in February. In March he took cold, and his cough and hoarseness became troublesome; but he was recovering again, when at the end of the month he was seized with pneumonia of the right lung attended with bloody sputa. This was relieved by bleeding and tartar emetic, the blood being buffed and cupped, and the serum dark; the sputa remained bloody, but bright red: his voice was almost extinct, and he wheezed in breathing. This last symptom on the 14th increased to extreme dyspnœa, of which he died, asphyxiated on the 16th.

Post-mortem examination.—Blood fluid, after eight hours coagulating very slightly on its escape from the chest. Heart empty, the blood having flowed from it. It was quite healthy,

except that the lining membrane of the ventricles was slightly opaque upon the projecting surfaces of the columnæ. Both lungs adherent, studded over with miliary tubercles in the centre of spots of black matter, and containing them within their substance; there were also two or three hard calciform particles. Each lung was attached to the diaphragm by old adhesions containing large vessels; and the right was hepatized at its base; the bronchi were red, and contained a bloody fluid. The entrance to the glottis was closed by œdema of the mucous membrane, which was so much thickened that the ventricles of the larynx were obliterated. Besides a large ulcer in the larynx there were several in the trachea which were covered with apparently tuberculous matter. The liver was twice its natural size, bound to the diaphragm by strong membranous bands, two of which were filled with the serum distending the abdomen, and looked like hydatids with long pedicles. The increased size of the liver was owing to hypertrophy of the areolar tissue, which had almost obliterated the lobuli by its pressure. The spleen was about six times its ordinary size, and contained one or two spots of yellowish tuberculous-like deposit. The kidneys were highly congested; about two and a half times larger than usual; they contained a few cysts, but no marks of Bright's disease. The lymphatic glands were not larger than natural.

The blood contained a much larger proportion than usual of white globules, as did also the spleen, which likewise contained numbers of fusiform cells with attenuated extremities exactly like some which were found commingled with the ciliated epithelium of the larynx. The liver-cells contained rather more oil-globules than usual. Dr. OGIER WARD, 20th of April, 1852.

11.—*Abscess of the Liver, which opened into the Lung, consecutive to Dysentery.*

W. L., aged forty-five, a carpenter, usually in the enjoyment of good health, was admitted into the Middlesex Hospital on October 28, 1851, under the care of Dr. Seth Thompson. Eight weeks previously he had been seized with violent purging of blood, mucus, &c., which continued for fourteen days,

at the expiration of which period the diarrhœa decreased somewhat, but was succeeded by a constant gnawing pain in the right hypochondrium. A week previously to admission, he had been following his employment, but finding his symptoms grow worse, he sought refuge in the hospital. On the third day after admission, he passed some blood and slime from the intestines, and, having been taken with a violent fit of coughing, brought up about two ounces of discoloured, but not fetid, pus. These symptoms continued, with little abatement, until his death, which happened three days afterwards.

Post-mortem examination.—The liver was found excavated by an abscess, the size of a large orange, filled with natural-looking pus. This abscess having contracted an adhesion to the diaphragm and base of the right lung, had made its way into one of the smaller bronchial tubes, and thus partially discharged its contents during life. There was another smaller collection of matter in the liver, distinct from the larger one, about the size of a marble, but in other respects the organ was healthy. The right lung was the seat of lobular pneumonia in various parts, but there was no collection of pus anywhere to be found. On the left side there was some pleurisy, and the lung was in much the same state as its fellow, but at the apex of its upper lobe were scattered various tubercles; and there was also a small cavity, containing cretaceous tuberculous matter. The other internal organs, and the small intestines, presented no traces whatever of disease. The large intestine, from one end to the other, was in a state of acute dysenteric inflammation, the disease being most severe at the opposite ends of the canal, the cœcum, and the rectum. These portions of the bowel were sphacelated, the mucous membrane being entirely disorganised, and of a dark purple or bluish colour. In many parts there hung down long sloughy masses, such as are found in phlegmonous erysipelas of a limb. The intermediate portions of the bowel exhibited the effects of the disease in a slighter degree; small portions of the mucous membrane being dead and in process of separation, and the glands being occupied by ulcers of variable size and depth. Throughout the whole track of the bowel, there were masses of disorganised epithelium and lymph lying on the inflamed surface.

The case exhibited a much more severe form of dysentery than is usual in temperate climates, and is hardly to be distinguished from the more acute disease of the tropics. [See for an analogous case, p. 349.] There is a clear history of bowel affection, antecedent to the disease in the liver, and it therefore affords a confirmation of the correctness of Dr. Budd's views as to the formation of such secondary abscesses. It is an interesting circumstance in connection with the disease, that at the Millbank Penitentiary, where the English form of dysentery is so common, Dr. Baly has not met with a single example of suppuration in the liver, though he has found the intestine in all stages of the disease, and the records of the prison, with a like result, extend back to the year 1824.

Mr. MITCHELL HENRY, 4th of Nov. 1851.

12.—*Hydatid Abscess of the Liver, opening into the Right Pleural Cavity.*

W. W., a chairmaker, aged twenty, was examined on the 24th November, at one P.M., having died at two A.M., the same morning. For three years he had been ailing. A month before his death he is said to have had a very severe attack of fever, accompanied by intense pain in the right side, and at this time enlargement in that neighbourhood was first noticed. It is most probable that the attack of fever marked the occurrence of suppuration of the hydatid cyst. The fever diminished, but the pain and swelling of the side continued, or rather increased, up to the time of death.

At the *post-mortem* examination the body was found extremely emaciated. The right side of the chest and abdomen was very prominent and bulging; the parietes tense and smooth; large veins were seen running superficially over the right hypochondriac region and lower part of the chest, and numerous hæmorrhagic spots were scattered over this part. At almost the first incision through the cartilages of the right ribs, a small amount of somewhat offensive gas escaped, together with a quantity of thin, yellowish pus, in which were floating numerous hydatids; these were all collapsed or broken, and of a yellow colour, many containing large bubbles of air. On laying open the chest, the

pleural cavity was found full of fluid similar to that which had escaped, its amount being several pints. The lung was collapsed, airless, and much reduced in size, covered by a layer of opaque buff-coloured, somewhat soft fibrin, a portion of which glued the lobes of the lung to one another, and the base of the lung to the diaphragm. The parietal pleura was similarly covered. Immediately in front of the root of the lung, the fibrinous deposit was more abundant, and there was a small quantity of thick creamy pus, which, on applying pressure to the liver, was somewhat, but very slowly increased in quantity. The liver was very large, extending from below the umbilicus to the space between the fourth and fifth ribs. The left lobe was somewhat larger than natural, but the great increase in bulk was due to enlargement of the right lobe, which seemed almost entirely converted into a large fluctuating cyst. The liver was adherent above to the diaphragm, but free elsewhere. On making a section through the anterior part of the cyst, a large quantity (four or five pints) of thick, white, creamy pus escaped, together with numerous hydatids resembling those obtained from the pleura in every respect, except that of not containing air. Among the hydatids was one—imperfect, but of very large size, which had probably, previously to the occurrence of suppuration, formed the lining of the cyst; this was very adherent at one part, and, on removal, a portion of it was found crumpled up, and deeply stained with bile. On washing out the cyst, its parietes were seen to be formed of a firm, whitish, fibrous material about a line in thickness, not laminated nor containing any earthy deposit, but presenting a somewhat reticulated surface, and in places arborescent markings, evidently the remains of obliterated vessels. At the upper part, where adherent to the diaphragm, the cyst-wall was thicker and firmer than elsewhere, and made up of condensed liver-structure and diaphragm inseparably united; this was partially destroyed in places by small, well-defined, sinuous ulcers, and was circumscribed also by ulceration, which had in many places laid bare the muscular fibres of the diaphragm; this was especially the case on the inner side, where they were exposed and perforated; the orifice, however, was in a great measure plugged up by a considerable quantity of the lining of the cyst, which had been partially

detached by ulceration. It was through this opening that the communication with the pleural cavity was established. At the posterior and lower part of the cyst was a somewhat valvular, oblique opening, large enough to admit the tip of the forefinger; it was found to be the orifice of the right hepatic duct, at about two inches from its junction with the left; the duct between these points was dilated and pale, contrasting remarkably with the left and common ducts, which were stained with bile; it was here beyond doubt that the large hydatid before mentioned had become fixed. This explains the adhesion that was noticed, the crumpled and bile-stained appearance of part of it, and also the paleness of the duct itself. On examining closely the parts in the neighbourhood of the orifice, it was seen that the posterior wall of the duct was prolonged in a branching form for some distance on the posterior wall of the cyst; that the prolongations were smooth and polished as the duct itself, distinctly margined, and presenting the orifices of other ducts, along some of which a probe could be passed for some distance. The walls of the cyst were about a quarter of an inch thick in front, and half that behind; they were made up externally of flattened liver-structure, and internally of the proper fibrous cyst-wall; the two, however, were inseparable, and passed gradually one into the other. The former presented microscopically an increase of fibrous tissue, with an almost entire absence of liver-cells, which were replaced by granules of oily material free and clustered; the latter presented almost the same characters, except that the granular material was in smaller, the fibrous in greater, quantity. The microscopic characters of the left lobe were normal. The heart was very much pushed over to the left side, but this and all the other viscera were healthy.

Besides the general interest of the above case, there are two or three minor points worthy of notice. 1st. The occurrence of air in the pleura—its presence in that situation, independently of pulmonary lesion, is very rare. In this case, though not noticed, it undoubtedly existed during life, and there is every reason to believe it was due to decomposition in the hydatids themselves, as the air was found not only free, but enclosed within them. 2nd. The contents of hydatid abscesses of the

liver are usually tinged with bile, whereas here they were almost a pure white, even though a large bile-duct opened directly into the cavity. It is certainly possible that the entrance of bile into the cyst was the primary cause of suppuration, and that the blocking up of the orifice by the hydatid prevented any further ingress of that fluid, and consequently enabled the contents to preserve their colour; but Dr. Bristowe was much more inclined to believe that in this case, and probably in many others, the suppuration was due to some other cause than extravasation of bile, and that the patulous state of the duct was a natural appearance resulting from the development of the hydatid within it. This is borne out by the facts, that there was no appearance of anything like ulceration in the neighbourhood of the orifice, that the duct opened abruptly into the cyst, instead of presenting a lateral ulcerated opening, and that its continuation on the wall of the cyst was smooth, polished, and with even margins; it can scarcely be imagined that ulceration could have perfectly destroyed one half of its calibre, leaving the remainder in the healthy and perfect condition in which it was found.

Dr. BRISTOWE, 2nd of December, 1851.

13.—*Extensive Laceration of the Liver, which the Patient survived Seven Weeks.*

J. W., aged twenty-three, was admitted into St. Thomas' Hospital in a state of extreme collapse, having been squeezed between a cart-wheel and a post. He remained without any re-action for nearly forty-eight hours, and then slowly revived, after having taken a very large quantity of brandy. Symptoms of peritonitis supervened, and were somewhat relieved by calomel, &c. The abdomen remained swollen, with distinct fluctuation on the right side. Oppression at the chest, with difficulty of breathing, gradually increased, till his death, which took place seven weeks and two days after the accident.

Post-mortem examination.—The right side of the chest more prominent than the left. The abdomen uniformly tense. On opening the chest, the right pleural cavity appeared to be filled with turbid serum, tinged with blood, in which was a large quantity

of imperfectly coagulated blood, about a quart, coated with fibrin or lymph, tinged with bile. The right lung had evidently suffered extreme compression. This fluid also communicated with fluid in the abdominal cavity, through what, at first, appeared to be a laceration in the diaphragm; further dissection, however, showed that the fluid supposed to be in the chest was not in the pleural cavity; but that the diaphragm had been pushed upwards into the chest as high as the upper edge of the third rib anteriorly and laterally, and internally to the interval between the second and third dorsal vertebræ; below the points indicated, it was adherent to the thoracic parietes. The right lung was compressed into the apex and posterior part of the thoracic cavity; the anterior margin of its base not extending lower than the interval between the second and third costal cartilages. The substance of the lung was healthy. Continuous with this thoracic extension of the abdominal cavity was a large and imperfectly circumscribed cavity, occupying nearly the right half of the abdomen, bounded below and towards the mesial line by the great omentum, passing obliquely downwards across the right iliac fossa; in this situation the boundary was imperfect, so that the large cavity above described as occupying the right thoracic and right half of the abdominal regions, communicated with a smaller cavity occupying the pelvis, and extending into the left iliac region, also filled with serum, turbid with pus; the pus being most abundant in the iliac region. These cavities were circumscribed by peritoneal adhesions. There had been slight general peritonitis, a small quantity of lymph being diffused over the surface of the intestines, but the adhesions were principally in the neighbourhood of the cavities above described. The liver was lacerated extensively, the injury extending nearly through the centre of the right lobe, the outer portion of which, almost detached, was displaced upwards, lying over the heads of the sixth, seventh, and eighth ribs; this portion was of a very light yellow colour on the surface, and extremely pale in its interior. The laceration ran parallel for a considerable distance with one of the largest branches of the right hepatic vein, but no branch of the first or second order appeared to have been opened, though the laceration extended almost to the vena cava. The liver was tilted

towards the right side, and one margin of the laceration being drawn towards the ribs, contributed to the deceptive appearance of a laceration through the diaphragm. All the other organs were healthy, with the exception of a very slight laceration of the right kidney.

Mr. WILLIAM ADAMS, for Mr. MACKMURDO, 2nd of December, 1851.

14.—*Suppurative Peritonitis, the result of Abscess of the Liver, causing Perforation of the Intestine and of the Abdominal Parietes.*

The body of W. S., a painter, aged twenty-nine, was anæmic, but not emaciated; there was a small oval ulcerated opening about an inch below the umbilicus. On opening the abdomen, a large quantity of thin, yellowish, somewhat offensive pus escaped from a cavity occupying its upper and anterior part. This was bounded in front by the parietes, above by the diaphragm, below by the transverse colon and great omentum, which were firmly adherent to the abdominal walls, behind by the stomach, spleen, and left lobe of the liver, and to the right by structures, afterwards to be noticed. The surfaces of the organs, forming the boundaries of this cavity, were not thickened or otherwise altered in structure. The firm adhesions existing between the colon and the parietes were found to be due to an irregular network of cellular tissue infiltrated with pus which lay between them, and was, in fact, altered omentum. At this part sinuses had formed in the muscular tissue of the parietes, communicating with the external opening; and the colon, on pressure, allowed a small quantity of gas and fluid to escape, being apparently similarly perforated. A coil of small intestine lay close beneath the colon, and was partly adherent to it and to the parietes in front by means of the same reticulated layer. The small intestines, which lay chiefly to the left side, were attached to one another by numerous adhesions, mostly healthy, and of tolerably recent formation; in some parts filamentous, in others membranous, and containing, in their interstices, clear, yellow serum. In one or two places, however, between them and the parietes were abscesses containing thick pus, separated by adhesions from the surrounding parts. On tearing the adhesions that existed to the

right of the cavity before mentioned, a second one was opened, which was filled with a large quantity of thick, greenish-brown, fetid pus, having somewhat of a fæcal odour. This cavity was limited in front and to the right by the parietes of the abdomen and ascending colon, above by the under surface of the right lobe of the liver, near the free edge of which was an irregular, ulcerated opening, communicating with an abscess in its interior, and to the left by adhesions and thickening of the suspensory ligament, gall-bladder, small omentum, and colon, the right upper angle of which was considerably depressed by the accumulation of pus from above; it also extended behind the stomach through the foramen of Winslow into the sac of the great omentum, and through this channel communicated, in the situation before mentioned, with the perforations in the colon and abdominal walls. Similar changes were found to have occurred in the neighbourhood of the cæcum: accumulations of pus had formed beneath it and the iliacus muscle, causing sinuses in it, and perforation of the gut. The walls of this cavity were much thickened throughout. The liver was somewhat increased in size; the entire surface of its left lobe (which projected into the first cavity) was smooth and polished; while that of the right was thickened throughout, forming by its lower surface, the upper boundary of the second cavity, and by its upper, being adherent to the diaphragm by firm membranous adhesions. In the middle of the anterior third of this lobe was an abscess, about as large as a hen's egg, irregular in shape, surrounded by a soft, opaque, yellowish substance, half a line in thickness, and opening into the cavity below by a sinuous, ulcerated opening about a square inch in area. The liver-structure, in the neighbourhood of the abscess, was altered, and presented several small circumscribed abscesses. The remainder of the organ was healthy. Near the centre of the anterior part of the transverse colon, the mucous membrane presented several flat, roundish elevations, from a quarter to two-thirds of an inch in diameter; they were soft and fluctuating to the touch, and two or three were perforated by minute orifices, whence pus exuded on the application of pressure. All these elevations were the result of the accumulation of pus between the mucous and muscular coats, the latter being perforated from

without by one or more (in most instances) distinct openings. On the right side of the cœcum were four or five more of these perforations; they were larger than those in the colon, and in all the mucous membrane had become ulcerated; they presented, however, the same characters. The mucous membrane was undermined to a considerable extent around the ulcerated openings, and the muscular tissue beneath was seen to be perforated, by which means communications were established between the cœcum and the peritoneal abscess. The large intestine, which contained only a few small lumps of solid fecal matter, was filled with pus exactly resembling that found in the cavity communicating with it. That part of the small intestine which adhered to the colon presented accumulations of pus between its mucous and muscular coats, but was not perforated. The posterior peritoneal surface of the stomach was thickened, but in all other respects the intestinal canal was healthy. The remains of old tubercles were found at the apex of each lung, and a slight degree of recent pleuritis at the lower part of each pleural cavity. The left common, internal and external iliac veins were filled by an adherent coagulum, partly decolorised, and softened internally into a puriform fluid. The corresponding lower extremity was natural. A similar clot was found in the vena azygos, occupying about three inches of its length; no other organ presented anything worthy of notice.

The history of the case is not satisfactory. About seven months before death he had suffered from dyspeptic symptoms, with a sense of weight and oppression in the epigastrium. These yielded to treatment, and about three months afterwards he first complained of pain in the right hypochondrium and between the shoulders. Six weeks before his death this had disappeared; he was then in a hectic state, weak, pallid, and with occasional sweats; two or three weeks after this profuse diarrhœa came on, and in a week or two more, or three weeks before his death, an opening formed near the umbilicus, which discharged offensive pus copiously; these discharges continued up to the time of death, but the nature of those evacuated per anum was never carefully examined. The abdomen at no time appeared distended, nor did he complain of pain in it while under observation; latterly,

however, he had had a little tenderness about the groins, and some pain in breathing ; the presence of pleuritis serves to explain the latter symptom.

In this case, the primary disease appears to have been abscess of the liver. This had opened into the peritoneum, causing universal peritonitis ; which, in the neighbourhood of the abscess, owing to the continual irritation kept up by it, had assumed a suppurative form, and became localised by adhesions. The pus accumulating in the cavity thus formed, had subsequently caused ulceration and perforation of its parietes at certain points. The mode of procedure in the case of the intestines appeared to have been the following :—

A muscular coat had first been perforated, and then a collection of pus had formed between it and the mucous coat ; which latter, after a time, gave way. The different stages were well marked in the preparations exhibited.

Dr. BRISTOWE, 16th of December, 1851.

15.—*Acute Abscess of the Liver consecutive to Enteritis.*

A man, aged twenty-three, by occupation a stableman, was admitted into University College Hospital, under the care of Dr. Garrod, on Friday, 5th Dec., 1851. His habitual state of health was reported to be good, and his present attack had only come on on the preceding Tuesday. He went to work on the Wednesday morning, but was obliged to leave off very soon, and from that time had been confined to bed, having suffered from violent pain extending over the whole abdomen, nausea, vomiting, and rigors. When examined, on Dec. 6th, he could lie on either side ; his cheeks were flushed ; skin rather hot ; no eruption on chest or abdomen ; complained of much pain over the whole abdomen, extending to the epigastrium, increased on pressure, especially in the right lumbar and iliac regions ; there was some resistance to pressure over the right rectus muscle ; tongue red at tip, and rather dry, covered with thin whitish fur ; had much thirst ; bowels confined, but they had acted that morning ; motions hard ; no yellowness of conjunctivæ ; hepatic dulness not increased ; no unusualfulness over the region of the liver ; the edge of liver felt one

inch below the edges of the cartilages; pulse 63, full, firm, but yet quite compressible. Leeches were applied to the abdomen, and calomel, with a mixture containing hydrocyanic acid, was given. By these means the pain was relieved for a time, but he still continued to complain of it on pressure, especially over the right iliac region. He was subsequently bled and leeches (depletion on each occasion giving him some relief from the pain), and had mercury and opium. The pulse varied in frequency, but, on the whole, gradually rose, until it was 126, a day or two before his death. He continued to vomit at times, and had shiverings frequently during his illness; the abdomen became distended, and the bowels relaxed several times in the twenty-four hours; he had hæmorrhage from the bowels twice, once a few days, and again a few hours, before death. Towards the end of his illness he referred the pain much more to the epigastrium than he had done at its commencement. Though he took a considerable quantity of mercury, his gums were not made sore by it, nor was his breath affected.

Post-mortem examination.—On opening the abdomen, the liver was found to project an inch and three quarters vertically below the ensiform cartilage. The anterior parietal portion of the peritoneum was slightly red from fine punctiform injection in patches; there were a few ounces of dirty, turbid-looking, but not puriform fluid, in the peritoneal cavity, free from any feculent smell. The omentum was greatly thickened, and red, and the lower end of it firmly united with a part of the small intestines, near the right iliac fossa. The peritoneum covering the intestines presented much more of the fine red injection than did the parietal peritoneum; the intestines were also covered at a great number of points with patches of opaque and recent lymph, and coils of them were closely united by similar lymph, especially at the right side of the abdomen, while a portion of one coil of the small intestines, at two inches from the ileo-cæcal valve, was so strongly adherent to the posterior part of the brim of the pelvis as to be torn on attempting its removal. The mucous membrane of the duodenum presented patches of moderately fine injection, while in the jejunum the mucous membrane was pinker in colour than natural, depending on fine punctiform injection, extending

almost uniformly over the surface. There was redness of almost the whole surface of the ileum, but more marked in some parts than in others; no enlargement of the solitary glands of the small intestines; a few patches of Peyer's glands were more marked than natural; the peritoneal and muscular coats were also redder than natural, and the latter, indeed, at some parts, was of a dark brown, or even approaching to a blackish colour. The redness of the mucous membrane, and the dark colour of the muscular coat, became more marked on approaching the lower end of the ileum, and especially within six inches of the ileo-cæcal valve. At several parts along the course of the small intestines the peritoneal and mucous coats could be separated with extreme facility, owing to the softened condition of the muscular and cellular tissues; and at some places these coats were indeed already partially separated, in consequence of pus having formed between them and amongst the muscular fibres. At one spot, fully a drachm of pus escaped from between the peritoneal and mucous coats. In consequence of the adhesion between the intestine and the brim of the pelvis already alluded to, and the softened condition of the former, two holes were made in the intestine on removing it from the body; but though near these places the intestines were somewhat ulcerated, there was no sign of perforation having taken place during life. The mucous membrane of the colon for the first eight inches was red, the injection being partly large, and ramiform, and partly fine; the colon itself was not so thickened, relatively, as the small intestine; there was a small patch of ulceration (not deep, and the edges not raised), of mucous membrane, about one inch and a half from the ileo-cæcal valve, but none other throughout its whole extent. The liver weighed 79 ounces; the right lobe was larger than natural in proportion to the left. At the left part of the anterior surface of the right lobe, close, therefore, to the left lobe, there was a portion of the peritoneal covering rendered less smooth and shining than the rest by a very thin layer of recent false membrane; this part, on pressure, felt less firm than the surrounding portions of the liver, and on cutting into it there were found a considerable number of small abscesses, or suppurating points, closely congregated together, varying in size from that of a millet-seed to that of a

horse-bean, and discharging, when cut into, a considerable amount of pus ; many similar small abscesses were found on making incisions into the substance of the liver, both on the under and upper surfaces. Some firmish dark coagula were found in the larger branches of the vena portæ, here and there slightly adherent to the lining membrane of the vein, which was also, at some points, a little rough ; several of the smaller branches of the vena portæ, in the neighbourhood of the abscesses, contained a considerable amount of dirty pinkish-grey coloured pus, which, on gently pressing the contiguous parts, flowed backwards into the larger trunks. No pus was observed in the hepatic veins. The spleen, pancreas, and other organs were free from purulent deposits.

Dr. Hare drew attention to this case as being an example of a somewhat rare pathological condition in this country—the occurrence of acute abscess of the liver from inflammation of the intestines. [See for an analogous case, p. 339.] The connexion between ulceration of the colon and abscess of the liver has been well established ; but this case appeared to be of special interest, from the fact, that here the inflammation of the colon was comparatively slight, while that of the small intestine had been intense, and such as to produce suppuration and destruction of some portions of the muscular coat.

Dr. C. J. HARE, 6th of January, 1852.

16.—*Specimens of the Echinococcus, from an Acephalocyst in the Liver.*

They were removed from a large acephalocyst which occupied, to a considerable extent, the right lobe of the liver : this viscus weighed 4 pounds 12 ounces, and was otherwise in a healthy condition. The parietes of the sac containing the acephalocyst were composed of a thick, tough, and yellowish fibro-cellular membrane. Within the cyst was about a pint of turbid fluid, in which were floating innumerable hydatids of all dimensions. The gall-bladder was filled with greenish bile, and the biliary ducts were of larger capacity than usual. Some of the echinococci were seen to be in their natural state—that is to say, with

the head retracted; but in others, where decomposition had set in, the heads were observed to be protruded. Numerous hooks or teeth were noticed under the microscope, scattered about. Dr. Beith stated that when decomposition of the little entozoa commenced, these parts usually fell off, and a detection of them in any cyst was a sufficient guarantee of the presence of echinococci. Drawings of these creatures were shown, and the account of Mr. Busk, in the *Microscopical Transactions*, respecting them, was referred to for further information.

It was stated that the patient, aged seventy-nine, from whom the specimens were removed, had died of serous apoplexy, and that, until twenty-four hours before his death, he had exhibited no marked signs of hepatic disease, but within that period he had become slightly jaundiced. Dr. BEITH, *20th of January, 1852.*

17.—*Morbid Deposit of a doubtful character in the substance of the Liver.*

The portion of liver exhibited contained one or two rounded, firm masses, of a light yellowish-white colour, and equal in diameter to a sixpenny piece. The entire liver contained many such growths, which were united, and, as it were, fused together, existing chiefly towards the central parts of the viscus. Moreover, the liver itself was in the early stage of that well-known condition, named cirrhosis, presenting, under the microscope, the appearances of chronic inflammation. At first sight, the appearance of these growths suggested the supposition that they might be of a carcinomatous character; but on microscopic examination they presented the aspect common to the so-called scrofulous deposits; no organized cellular or fibril formation or vessels existing. No morbid growth of this or any other kind was found in the lungs or in other parts of the body. The patient had considerable disease of the kidney, and died of an obscure form of pneumonia.

Owing to the circumstances of the case, the question arose, whether the morbid matter, having the simple character of scrofulous deposit, should be considered as such *bonâ fide*, notwithstanding the infrequency of scrofulous deposits in the liver,

and in opposition to the supposed rule strongly laid down by Louis and others, that if any organ in the body be alone affected by scrofulous deposit, that organ is the lung. On the other hand, supposing the growths to be considered as essentially connected with the general diseased state of the liver, it becomes a consideration, how or why they should have assumed the peculiar form which they had; and why they should not have advanced higher in the scale of organization, but remained in so low a position as to deserve classification among the so-called scrofulous deposits. May it not be probable (and this would seem to bear upon the true character of many morbid deposits, hitherto, and at a future time, to be brought under notice), that in certain cases, either from some unwonted state of the plastic material which the blood itself affords, or from some altered character of the solids which renders them incapable of duly realising and assimilating what the blood offers to them, that from such reasons as these, that which should be appropriated in the usual healthy way, either in the act of nourishment or inflammation, remains in a comparatively elementary condition, and has all the features of scrofulous deposit. This supposition would also seem to show how scrofulous deposits may present appearances of varied organization, attaining even, in some instances, to a high degree thereof, being much unlike what is commonly held to be characteristic of them.

Dr. OGLE, 17th of February, 1852.

Report on the Morbid Deposit in the preceding case.—The white mass consists of an amorphous blastema, which is full of granular matter and oily molecules, and contains also very numerous nuclear corpuscles. On adding liquor potassæ or acetic acid, the substance becomes more transparent, and there are seen in it many glistening masses, apparently concrete oily matter, as well as groups of crystalline particles, which appear to have something of a needle shape, and are probably margaric acid. No cells or organized corpuscles besides the mere nuclei are seen. I should consider it scrofulous deposit. The spots in the kidney (see page 384 *et seq.*) consist of similar matter, but it contains proportionably more nuclear corpuscles.

Dr. HANDFIELD JONES, 2nd of March, 1852.

18.—*Fibrinous Deposit in the substance of the Liver and Spleen.*

The liver was entirely and uniformly occupied by the deposit, so that it presented a yellowish-white, indurated character throughout, being in places slightly mottled and speckled, but containing an exceedingly small amount of blood. It was greatly increased in length, but not in thickness, and weighed 6 pounds 6 ounces. Its capsule was thickened, and it was adherent by "false bands" to the diaphragm and to the spleen, which it considerably overlapped. The spleen presented much the same general character, weighing 3 pounds 6 ounces, and measuring ten inches and a half by fifteen. It was also infiltrated uniformly by a light yellow fibrinous deposit, excepting at its lower extremity, where a large amount of fibrine was accumulated into a single mass, which presented at the surface of the organ. A very small amount of blood existed in the spleen, which, on microscopical examination, appeared quite healthy. The arteries of the spleen appeared natural, though they gave way, on removing this organ, with unusual readiness. Turbid fluid, and recent lymph existed in the peritoneal cavity, and the omentum was much thickened, and discoloured by fibrinous exudation into its texture. There was also found much atheromic and calcareous deposit in the coats of the aorta, and a highly-diseased condition of the kidneys. The lungs and heart were not diseased.

These specimens were removed from the body of a woman who died in St. George's Hospital, aged fifty-seven. She died very gradually by asthenia, and, excepting an obscure history of jaundice, nothing was known of her previous symptoms. The specimens appear, in conjunction with the other *post-mortem* results, to illustrate the following position, *viz.*, that a certain condition may exist, either of the blood itself, or of its distributors, the capillary system generally, in which a tendency to the exudation of fibrine, with or without some of the colouring matter of the blood, specially results; the exudation taking place into the various tissues and organs, and not infrequently into several at the same time, as the lungs, liver, kidneys, spleen, &c. It is probable that this tendency will be found to be the interpretation of many instances of secondary inflammation, so-called,

arising in the course of other affections, and of those following injuries and operations, though these are generally attributed to purulent infection : also of many instances of extravasations of blood into the substance of the brain or lungs, which often coincide with, but are not possibly, as supposed, dependent upon certain affections of the valves of the heart, which affections are obviously the result of an alteration in the blood's composition. It is probable, also, that the various atheromic, steatomatous, and calcareous deposits, producing such dire effects in the walls of arteries, are the results of excessive fibrine in the blood, which has become precipitated ; and many diseased conditions of the kidney also appear connected with some such tendency ; at any rate the *visible* fibrinous exudations demonstrated in so many cases, and known as fibrinous casts of the urinary tubes, lend some weight to such a supposition.

Dr. OGLE, 4th of May, 1852.

19.—*Abscess of the Liver opening into the Right Pleura and Lung.*

W. W., aged forty, a sailor, admitted into hospital on the 24th of December last, stated that six months ago, when in India, he was attacked with dysentery, from which he had only just recovered. Two months previous to admission, he first complained of pain in the right hypochondriac region, and corresponding shoulder ; these symptoms persisted, more or less, until the time of his death. When admitted he was in a greatly emaciated state, and suffered from dyspnœa, cough, and slight expectoration, in addition to the symptoms above spoken of. On examination of the chest, percussion gave dulness of the right side in its whole extent, except in the subclavicular region ; respiratory murmur, and that faintly, to be heard only here. No bronchial breathing or bronchophony. Puerile respiration on the left side ; heart's sounds natural ; bowels regular. He improved under treatment, but on the 30th of March he was attacked with sudden dyspnœa and cough, and expectorated a large quantity of purulent matter slightly tinged with blood, not less, indeed, altogether than two pints. The urine soon became loaded with

lithates. The motions were yeasty, with no admixture of blood or pus, and the constitutional symptoms ran high. His condition became daily worse, and he lingered on till the 26th of April, when death ensued.

Autopsy.—Right pleural cavity filled with pus; pleura thickly coated by lymph: lung collapsed and bound down to the spine. There was an aperture in the diaphragm by which the right pleural space communicated with a large abscess in the corresponding lobe of the liver. The heart and opposite lung were healthy. In the descending colon there were old, firm cicatrices; likewise in the sigmoid flexure. The ulcers which had preceded the scars, must have been extensive both in breadth and depth.

Dr. Beith remarked, that he thought the above case an excellent illustration of the absorption of pus which occurs sometimes from dysenteric ulceration, and forms a *dépôt* in some excreting organ. The hepatic symptoms had led to the belief that the liver was in this manner affected, and the subsequent thoracic symptoms were believed to be dependent upon the cause which was discovered at the autopsy to originate them.

Dr. BEITH, 18th of May 1852.

20.—*Intestinal Obstruction, of twelve days' duration, from Stricture of the Ascending Colon: with Operation for Inguinal Hernia, supposed to be Strangulated.*

The illustrative specimen consisted of a portion of indurated omentum, from a hernial sac; and a stricture of the colon, both taken from a man, aged seventy-five, admitted into the Middlesex Hospital, 22nd Dec., 1851. The patient had had inguinal hernia of the right side, for which he wore a truss, for twelve years. Twelve days before his admission, it descended, and he was unable to reduce it. Although he had taken a great deal of purgative medicine, he had had no evacuation of the bowels since that date, but had had frequent vomiting, which for several days had been stercoraceous. It was not till the day of his admission that he showed his hernia to a surgeon. The tumour, of the size of a hen's egg, was not only tense, but had a solid feel; it was situated immediately below the external abdominal ring; there

were fulness, pain, and tenderness on pressure, in the right iliac region ; pulse quick and small ; tongue dry and brown. After a short trial of the taxis, it was resolved to operate. So abruptly did the tumour rise from the edge of the external abdominal ring, that the idea was entertained of relieving the stricture without opening the sac ; but considering that the bowel supposed to be protruded, was probably in an unfit condition to return, that intention was abandoned. When the peritoneal sac was opened, there was exposed a circumscribed mass of omentum, so condensed that it was impossible to unfold it. Expecting to find a knuckle of intestine in the mass, successive layers were divided on the director ; each as it was cut grated under the knife, like fibro-cartilage ; and they could even be peeled or torn aside with the fingers. When the centre was nearly reached, and no bowel appeared, the neck of the sac was laid open ; omentum of natural consistence was alone found ; and the finger was readily passed into the abdominal cavity. At this stage, the patient had an irresistible call to pass his fæces, and about six ounces of liquid motion came away. The operation was finished by cutting through the sound omentum, tying several vessels, and excising the indurated mass, which adhered slightly to the sac. Till his death on the fourth day, the patient remained in a state of great prostration, increased by his having bronchitis. The bowels not having acted again, the stomach-tube was passed, the second day, a foot up the rectum, and warm water injected, but it returned without any motion, and he had no evacuation afterwards. The urine was of usual quantity.

On the *post-mortem* examination, there were signs of recent inflammation in the omentum and intestines near the mouth of the hernia. What principally attracted attention, was a dilatation of the cœcum with the ascending colon, and a sudden narrowing of the bowel at the commencement of the transverse arch ; then another dilatation of the transverse arch beyond the narrowing. On examining the constricted portion, the bowel was found held down by firm adhesions to the right kidney : at this part there was a stricture of the colon, half an inch in length, so narrow that a goose quill could alone pass through it ; this stricture was produced by deposition of cancerous matter in and around

the walls of the intestine ; and numerous tubercles of the same structure extended to the adjacent parts, giving rise to the adhesions. The lower part of the small intestines, the cœcum and ascending colon, were filled with fæces of solid consistence : and it was a remarkable circumstance, that the transverse arch, for two feet beyond the stricture, was also loaded with fæces, in distinct large lumps ; from the weight of which, this part of the colon hung down towards the pelvis, in a fold of considerable prominence. Cancerous tubercles, varying in size from that of a field-bean to a mustard-seed, were thinly scattered, in small groups, over different parts of the visceral and parietal peritoneum ; and they were more abundant in the neighbourhood of the hernial sac. Led from these appearances to inspect the tumour of indurated omentum removed from the sac more carefully, it was seen to be studded with tubercles similar to those in the abdominal cavity ; it was the deposition of that morbid matter in the omentum, which gave to it its great density.

Mr. Shaw directed attention to the peculiarity in this case, of the colon beyond the stricture and nearer the rectum being filled with feculent matter for a considerable extent ; and he remarked that such a condition would increase the difficulty of diagnosis in similar cases. With regard to the operation, which the issue of the case showed to have been uncalled for, he briefly related a case of intestinal obstruction, where the symptoms were at first those of strangulated hernia. He discovered in the groin of the patient, a lady, a round tense swelling, of the size of a small egg, which emerged from the femoral ring, under the crescentic arch. Thinking that this tumour was a hernia, as it could not be reduced by the taxis, he operated upon it. He presently found that the supposed hernial sac was a serous cyst ; by dissecting it away, he exposed the cribriform fascia, and satisfied himself that there was no opening into the abdominal cavity. The means employed to overcome the obstruction of the bowels failed ; the patient refused to submit to any other operation ; and on the tenth day from the commencement of the obstruction, she died unrelieved. No *post-mortem* examination was allowed.

MR. SHAW, 6th of January, 1852.

21.—*Double Congenital Hernia, in which the cavity of the Left Tunica Vaginalis was divided into two unequal portions by an Adventitious Membrane.*

A bailiff, aged thirty-seven, was admitted into the London Hospital, under the care of Mr. Luke, with symptoms of strangulated hernia. Five days prior to admission he had fallen out of a cart, and was much shaken by the fall. On the evening after the accident his rupture descended on the left side; attempts at reduction were made shortly after, and persisted in for about half an hour with apparent success. Immediately after reduction he felt quite easy, but pain in the bowels followed by sickness soon supervened. The symptoms of strangulation continued till he entered the hospital. On examination, an irreducible congenital omental hernia was diagnosed on the right side, although the patient was not aware of its existence. On the left side an obscure tumour was felt in the inguinal canal. An exploratory operation was performed, and the wall of the sac, which had evidently been pushed somewhat upwards, was incised a little above the level of the inner ring. The intestine contained in the sac was dark claret-coloured, but not devoid of lustre. The man died on the third day after the operation, in consequence of a violent attack of diarrhœa. He had been subject to rupture on the left side for nine or ten years, and on its last descent, his truss happened to be off.

On the *post-mortem* examination, there was found on the right side a hernia into the tunica vaginalis, consisting of a large portion of the great omentum, so that the transverse colon had been dragged to within an inch of the internal ring, the omentum was adherent to the sac, and the lower part concealed the testicle from view, thus verifying the diagnosis which had been formed on the admission of the patient. The neck of the left hernial sac had been divided a little above the internal ring. On laying open the sac, by a vertical incision carried to within two inches of the scrotum, it was found distended with seropurulent fluid. The vas deferens five times its ordinary thickness, and covered over by a dense layer of fat, was observed at the outer and back part of the sac. The testicle was not seen nor the epididymis,

but on passing the finger to the bottom of the sac, the nail could be insinuated between the upper part of the body of the testicle and the epididymis, and a smooth dense ring in the bottom of the sac, as though the tunica vaginalis had an opening below. On extending the vertical incision to the bottom of the scrotum, the body of the testicle was exposed. It was much altered in position; the anterior and inferior border looking downwards, backwards, and to the left side, the epididymis looking upwards, forwards and to the right. On the outer and back part of the body of the testicle, immediately below the globus major, was a somewhat semilunar opening, the size of half a sixpence, leading upwards to a cul-de-sac on the outside of the chord, gradually contracting as it proceeded upwards, and one inch and a half in length. The cavity in which the somewhat atrophied testicle was, was larger than sufficient to contain it, not glistening on the surface, but covered over with layers of soft false membrane. On cutting through the ring which girt the upper part of the body of the testicle (and which appeared at first sight to be the boundary of a perforation in the lower part of the parietal tunica vaginalis), and making slight traction of the structure which formed it, it was found that it could be stripped easily away from the subjacent membrane, which latter, when thus exposed, resembled that surrounding the body of the testicle. Then the tunica vaginalis was divided into two unequal portions, by the development in its upper two-thirds, of an adventitious sac which contained the hernial protrusion, and the spermatic chord; and by its lowermost portion completely encircled the testicle without adhering to it. The wall of the adventitious sac was dense, and was one-tenth of an inch in thickness. During life the hernia must have descended into this false sac, above the body of the testicle which would have formed a distinct swelling below it; and thus the diagnosis of its being a congenital form of protrusion would not have been made.

Mr. NATHANIEL WARD, *20th of January, 1852.*

22.—*Specimen of Internal Strangulation of a portion of the Small Intestine by a strong Fibrous Band connected with the Mesentery.*

A healthy child, aged six, was taken ill on the 16th of April, with vomiting. The sickness continuing on the following day, and the bowels not acting, her mother gave her a purgative, which had no effect; a second was given on the third day with a like result. The sickness and constipation continued, and on the fourth day the child was taken to Mr. Robert Wilson. He could detect but little pain on pressing the abdomen, the tongue was but slightly furred, and her general appearance did not indicate any immediate danger. Purgatives were prescribed, only one of which, however, was taken, and immediately rejected. About half-past seven in the evening, a fit of vomiting seized her, she asked to be taken by her mother, and immediately expired. During the illness, the child never kept her bed, and a few moments prior to death was sitting by the fire-side and appeared to her mother to be better.

On a *post-mortem* examination but a slight result of peritonitis could be detected. Seven or eight inches of the lowest part of the small intestine were found strangulated by a ring formed by a strong round fibrous band passing from the mesentery, close to the commencement of the large intestine. This band passed along the front, lower, and back part of the constricted small intestine, and having reached the upper part of the posterior surface looped in front of the commencing portion, and then dipped downwards, terminating in a spheroidal eminence equal to a large pea, which was connected by a fibrous band to the anterior surface of the rectum. The intestine which had passed through this ring was dark, livid, and lustreless, and here and there covered over with a small quantity of fibrin. No trace of vermiform appendix could be detected, and the cœcum was connected with the lowest fold of the small intestine by recent lymph.

Mr. NATHANIEL WARD, 4th of May, 1852.

23.—*Dysentery with extensive Sloughing and Ulceration of the Large Intestines.*

In this instance the disease affected in its extreme degree large tracts of the ascending, transverse, and descending divisions of the colon, and the rectum. The colon presented very numerous ulcers; some of them many square inches in extent, involving the whole circumference of the intestine; others of the size of a shilling; and others of smaller size down to that of a split pea. The surface of the larger ulcerations was, in some parts, dark and ragged from sloughs still adherent, but hanging loosely from the surface; in others, pulpy, as if formed of half-dead areolar tissue; in others, again, it was obviously constituted by the muscular coat laid bare by the destructive process; lastly, in three or four instances even the muscular coat was destroyed, and little more than the serous coat remained to preserve the integrity of the canal. The borders of all the ulcers were far undermined, thin, and ragged. The coats of the intestine at the chief seats of the disease, where not destroyed, were much thickened by effused lymph and blood, and vascular congestion. The rectum presented no large ulcerations, but very numerous small round ulcers, here and there confluent, passing deeply into the thickened coats, and producing a worm-eaten appearance. These ulcers, as well as the smaller ones in the colon, could be clearly traced to enlargement and sloughing of the solitary follicles. Dr. Baly exhibited, in illustration of the morbid changes observed in this case, several coloured drawings by Perry and Bagg.

The patient from whose body the intestine above described was taken, was a young woman, aged twenty-four, a prisoner in the Millbank prison. She had been convicted of the murder of her infant child by burying it while alive; and, like many persons of the lower class guilty of extraordinary crimes, was very dull in intellect. Hence she had been ill a fortnight before she made such complaints as caused her removal to the infirmary. She then confessed to having had severe purging, with very frequent stools, and much tenesmus; but when seen by Dr. Baly, in the infirmary of the prison, she had these symptoms no longer, but had others which he regarded as equally pathognomic of dysentery

or colitis—namely, considerable tenderness of the abdomen, and copious watery discharges, accompanied by symptomatic fever, and a dry, red tongue. These symptoms, according to Dr. Baly's experience, attend inflammation of the large intestines only; and when present even in typhus and typhoid fever, may be relied on as indicating a severe affection of that part of the intestinal canal; for the most intense and extensive affection of the small intestines alone, in fever, will not produce copious watery stools, nor, except the peritoneum be involved, any marked pain or tenderness. The patient, in the present case of dysentery, died after a month's illness from the hæmorrhage consequent on the sloughing process.

Dr. BALY, 18th of November, 1851.

24.—*Perforation of the Intestine in a Case of Typhoid Fever.*

Two cases of typhoid fever (with rose spots) had occurred in the house in which the child, aged five years and a half, from which this specimen was taken, resided. The little patient, a girl, had been ailing for a week or more, when Mr. Wright, of Brixton, saw her. Her symptoms were—heat and dryness of the skin, dryness of the lips, white furring of the tongue, great thirst, slight headache, much vertigo, pulse 110 to 120, urine high coloured, three or four yellowish or brownish motions daily, no pain of the abdomen, on which there were five or six rose-spots. She had slight cough, with a little sonorous and mucous *râle* over a part of the chest. During the second week she had increase of diarrhœa, and some delirium at night. On the 13th of Dec. Mr. Wright was called up at night in consequence of the patient being seized with a sudden increase of pain in the hypogastric region. She had had, within the previous hour, four copious yellow liquid stools, accompanied by griping and general pain over the abdomen. There was no marked tenderness on pressure over the abdomen. Chalk-mixture with tincture of opium gave temporary relief; but the marked alteration of the countenance, and the increased rapidity of the pulse, led to an apprehension that perforation had taken place, though there was no tenderness on pressure. At ten next morning, she complained, in addition, of occasional

shooting pains in the region of the bladder. At eight P.M. there was collapse of the features, exquisite tenderness of the abdomen, especially in the hypogastric region, rapid pulse, vomiting, and diarrhœa, which continued until within an hour of death, which occurred at seven o'clock on the following morning; that is, twenty-nine hours after the sudden accession of pain, and on the thirteenth day of decided fever.

Post-mortem examination.—General peritonitis, with effusion of lymph in the abdominal cavity. Ulceration of several of Peyer's patches. In one of these, about four inches from the cœcum, perforation had taken place; but little of the contents of the intestine had escaped through this opening.

Dr. R. QUAIN for Dr. MERYON, 16th of December, 1851.

25.—*Chronic Inflammation, and thickening of the Cœcum and Lower Part of the Ilium, with Ulceration of the Mucous Membrane, produced by the Lodgment of Gall-Stones.*

A lady, aged thirty-seven, of lymphatic temperament, with œdematous legs and feet, had been for nearly three years the subject of chronic diarrhœa, with occasional attacks of vomiting attended with severe abdominal pain. During this period she had not menstruated. Prior to her illness, which was preceded by a severe bilious attack, her bowels had been constipated. Until three months before her death she had been under the care of a practitioner in the country. When she came under the notice of Mr. Hovell, astringents, with alterative doses of calomel and opium, and occasional doses of castor oil, were given. Under this course her appetite improved, the œdema disappeared, and the diarrhœa was moderated from five or six to two or three stools a-day; the motions being of the colour and consistence of pea-soup, occasionally with scybala. About three weeks before death she had an acute attack of gastro-enteritis, with great pain and tenderness of the abdomen. This yielded quickly to calomel and opium, saline medicines, local fomentation and mustard cataplasms; the stools, also, became much more healthy, and deeply coloured with bile for a period of a few days, when diarrhœa recurred, and continued unabated till death, attended with

constant retching and vomiting of bile and mucus, without rejection of food.

The lower part of the ilium, three inches in extent from its connection with the cœcum, was found much contracted in calibre with the muscular coat hypertrophied; and entirely devoid of mucous membrane, which had been destroyed by ulceration. A similar condition existed in the cœcum and the upper-third of the vermiform appendix. A mere ridge of hypertrophied muscular fibre indicated the original position of the ilio-cœcal valve. Large gall-stones, worn flat apparently by attrition, were found in the ilium and cœcum. The upper part of the former also was occupied by a very large agglomeration of gall-stones, oval in outline, two inches in its long, and one inch and a quarter in its transverse diameter. It was situated three feet from the cœcum, the gut round about it was thickened, and the mucous membrane ulcerated; below it the gut was strictured.

MR. NATHANIEL WARD for Mr. D. HOVELL, 2nd of March, 1852.

26.—*Diverticulum from the lower portion of the Ilium.*

The patient, a boy, aged fourteen, was admitted into King's College Hospital, under the care of Dr. Budd, on the 14th of April, 1852, with symptoms of acute peritonitis. The only point of any importance in his previous history was that he had been subject to frequent attacks of constipation for two or three days at a time. His illness commenced on the 10th of April, with severe griping abdominal pain, consequent, as he supposed, on eating an oyster-supper on the previous evening. The pain was so severe as to prevent him from sleeping at night. His mother gave him a dose of purgative medicine, and afterwards administered two pills, but the treatment was not followed by the desired relief.

At the time of his admission he was suffering from severe pain all over the abdomen, which was more acute in the right iliac region than in any other situation, and was much increased by pressure. He vomited very frequently, and rejected everything he swallowed. His features were pinched, and his eyes glassy. His pulse was 136, very small and feeble, his respiration was 24,

and entirely sternal. An enema administered brought away some scybala. Other appropriate treatment was pursued up to the time of his death, which took place on the 18th of April, four days after admission, and eight days since the symptoms of peritonitis commenced.

The body was examined about twenty-four hours after death. Surface pale, features much pinched, abdomen distended; everywhere tympanitic. The cavity of the peritoneum contained about a pint of a dirty purulent-looking fluid in which a few whitish coagula were suspended. The intestines generally were much distended with air, and the peritoneal surface was everywhere covered with a layer of opaque yellow lymph, which in some situations was very abundant, so that several coils of intestine were glued together, but were easily separated by slight force.

The fluid taken from the lower part of the belly was of a brown colour, and had a distinctly fæcal odour. After the fluid had been removed, the continuity of the intestine was carefully traced downwards from the duodenum to within about fifteen inches from the cœcum, in which situation a diverticulum was discovered about the same diameter as the intestine at its origin, but increasing considerably in size as it extended downwards into the pelvis, until it terminated in a cul-de-sac. The diverticulum was altogether about three and a half inches in length, and extended downwards in the cavity of the pelvis, in close contact with the rectum: it was at least twice as broad in its lower part as at its origin. For about the upper two inches the coats were thick, and had all the characters of the intestinal coats, but below this the tissue was so thin and rotten, that, in breaking down some adhesions, in order to remove it from the body, the fundus was unavoidably torn. About the centre of the anterior surface of the diverticulum there was a round hole about three-eighths of an inch in diameter, and with a thickened margin. This communicated freely with the intestine, and with the cavity of the pouch: and through this perforation a cherry-stone, the coriaceous covering of several orange pips, and two masses of very irregular form and tough consistence were removed; the latter substances in texture much resembled the concretions that

are often found in the intestines of horses. Through the opening above described no doubt the contents of the intestine were discharged into the cavity of the peritoneum. The bowel below the diverticulum was pervious, and the large intestine was much distended with air. The other viscera appeared healthy, but the peritonitis was generally diffused over the whole surface of the serous membrane.

Dr. LIONEL BEALE, *4th of May, 1852.*

27.—*Cancer of the Cæcum.*

S. C., aged thirty, was admitted into King's College Hospital on December 12th, 1851, under Dr. Todd. The patient had never had any children. For the last three years she had been exceedingly pallid, and had suffered from pain in the right iliac region. The pain at first only occurred occasionally, at intervals of a few days or a week, but it gradually increased, and the intervals of ease became less until about six months before her admission, since which period she has never been entirely free from pain. At the time of her admission, she presented the appearance of a person who had lost a large quantity of blood; her skin was quite free from colour, and her lips and gums were very pale. There was a manifest fulness in the right iliac region, and in this situation percussion was always dull, and slight pressure increased the pain.

The patient said that she had never lost blood at any time, and had enjoyed excellent health until her present illness commenced.

The catamenia had always been perfectly healthy. She had never suffered from diarrhœa, and the action of purgative medicines did not produce severe pain; indeed, the patient always expressed herself better when mild purgatives were ordered for her, and used frequently to ask for a dose of castor-oil.

Dr. Todd thought that the swelling in the right side depended upon the presence of some kind of malignant tumour, situated probably in the iliac fossa, and pushing the cæcum towards the centre of the body.

The patient remained much in the same state, with the ex-

ception of getting gradually thinner and weaker, until April the 10th, when the left arm became œdematous, and, on the 15th, a similar condition appeared in the right leg; but the œdema of the arm subsided. On the 29th, chest symptoms manifested themselves in the occurrence of difficulty of breathing, and the development of a pericardial rubbing sound. At the same time, dulness on percussion was found to be present over the greater part of both sides of the chest, and there was also a total absence of vocal vibration. The patient gradually sank, and died about twenty-four hours after the appearance of these symptoms.

The *post-mortem examination* was performed about twenty-four hours after death. Both pleural cavities and the pericardial sac were distended with fluid. The whole surface of the pericardium was covered with a rough and coarsely granular layer of lymph, which was about the eighth of an inch in thickness, but had been deposited in the greatest quantity over that portion of the serous membrane covering the right ventricle. The lungs were somewhat infiltrated with fluid, but otherwise appeared healthy. The left subclavian vein, with the axillary and one of the venæ comites, was completely plugged up by deposits of fibrin, which, in many situations, was almost colourless.

The liver was large and fatty. The spleen was not larger than natural, but pale and firm, and its trabecular tissue appeared to be largely developed. Upon microscopical examination, it was found to contain a great number of corpuscles resembling the white corpuscles of the blood.

The right iliac fossa was occupied by what appeared, at first sight, to be an abscess, communicating with the intestine in two places. The walls of the cavity were adherent to the liver above, and to the fascia covering the iliacus muscle externally. A portion of the anterior edge of the liver, about the size of half-a-crown, formed part of the upper boundary of the cavity, and was covered with a slough.

Upon further examination, it became evident that this cavity was in fact the cœcum; its continuation into the ascending colon above could be distinctly traced, and the ilio-cœcal valve was present in the position which would have been anticipated.

The interior of the cavity was everywhere in a sloughy state, and several detached portions of sloughing tissue were found in the fluid contained in it. The walls in many places were much thickened, and the adhesions to the liver were firm. Situated immediately beneath the tumor, were several enlarged lymphatic glands.

Upon microscopical examination of the walls of the cavity, many cells, having the appearance of those met with in specimens of hard cancer, were observed; they varied much in size and form, some being oval or circular, others elongated, angular, or fusiform; the cells were granular, and a distinct nucleus could be found in almost all of them.

Dr. Todd considered this to be a case of cancerous disease of the walls of the cœcum, which had gradually assumed a sloughy condition. He accounted for the absence of symptoms of this condition of the cœcum, by observing the contiguity and the position of the openings of the ilium and colon, which were so situated that the contents of the ilium might be propelled into the colon by the contractions of the ilium alone, and in this way he thought that the cavity of the cœcum being kept free from feces, contraction of this portion of the bowel for the further propulsion of the contents was rendered unnecessary. A portion of one of the enlarged glands was also subjected to microscopical examination. It contained many cells, much resembling those present in the walls of the tumor, much granular matter, and many free oil-globules.

Dr. LIONEL BEALE, 18th of May, 1852.

28.—*A portion of the Rectum which, having protruded, had been cut off.*

The person on whom this operation had been performed, had suffered severely from intermittent fever, and was much debilitated from its effects. Whilst a convalescent, he was attacked with acute dysentery: and, during the efforts to relieve the bowels, a prolapse of the rectum occurred, when, experiencing insuperable difficulty in its reduction, he requested a non-professional friend who had called upon him, to be "so oblig-

ing as to cut it off." This request was complied with, to the satisfaction and present relief of the sufferer. The bowel removed, when examined subsequently, was found to have been cut off by an irregular and oblique incision, so that it was of the extent of three inches on one side, and but an inch and a quarter on the other. On a close examination, it was found that the specimen was composed of all the tissues of the gut. Urgent symptoms set in on the second day after the removal, when more of the rectum was extruded, and subsequently removed by operation, in consequence of the impossibility of treating it by any other method. The patient subsequently recovered.

Dr. BEITH, for Mr. DICKSON, 18th of November, 1851.

29.—*Case of Diseased Rectum, in which an Artificial Anus was made in the Left Loin.*

The parts were removed from a female, aged fifty-three, in whom an artificial anus was made in the left loin, to relieve an obstruction in the bowels, caused, as was supposed, by a stricture of the rectum. The medical gentleman to whom I am indebted for the history of this case, informs me that the patient came under his care about two years ago, with symptoms resembling dysentery. There were frequent scanty ejections like the white of egg, mixed sometimes with pus and blood, but no feculent matter came away, unless purgatives were administered. These symptoms had existed, with more or less severity, for nine months, and came on after an attack of what the patient declared to be cholera. After she had been under treatment five weeks, she was attacked with considerable pain at the lower part of the abdomen, and from that time the bowels refused to act in spite of purgatives and aperient enemata, the latter of which caused the patient great pain, and came away as fast as they were injected. A surgeon being called in, the rectum was explored, both with the finger and with the bougie; the latter of which could not be passed beyond six inches, owing to an obstruction which it there encountered. This fact, together with the immediate return of all fluids injected per anum, and the obstinate constipation, induced the surgeon to conclude that a stricture of the bowel existed; and

after twelve days had elapsed without a motion being procured, it was determined to open the descending colon in the left lumbar region. The operation was accordingly performed, and a large quantity of fæces came away through the artificial opening, with great relief to the patient. After a few days it was observed that another kind of matter came away from the artificial anus, in addition to the fæcal matter ; and the patient, without any very obvious cause, became thinner and weaker, and eventually died ten days after the performance of the operation.

On examining the body after death, the viscera, brought into view on laying open the abdomen, occupied their natural positions, and appeared healthy except the uterus. Attached to this organ were four tumors, three of which were fibrous, and the fourth was a cyst connected with the left ovary, as seen in the specimen presented. The two largest of these tumors encroached upon the rectum behind, to which, indeed, they were firmly united, and formed a part of the walls of that gut ; they did not, however, project into the bowel sufficiently to cause an obstruction to the passage of matters through it, inasmuch as an ordinary sized rectum bougie, introduced per anum, readily passed beyond them, and encountered no obstacle till it reached the promontory of the sacrum, by which its further progress was arrested. On removing the diseased mass, together with the rectum, and slitting up this tube behind, all that portion of it opposite the uterus, measuring three inches in longitudinal extent, was found extensively disorganized, its mucous membrane being entirely destroyed, and the whole surface having a dirty ash-coloured sloughy-looking appearance ; portions of two of the tumors, before alluded to, projected somewhat into the bowel, and formed part of its parietes ; and it was doubtful whether in this situation all the coats of the bowel had not been destroyed. The portion of rectum immediately above and below the uterine tumors, were affected in a similar manner, though in a less degree ; for here and there were seen patches of mucous membrane that had escaped the sloughing process ; they were of an oval or roundish form, and were raised above the level of the surrounding surface. On approaching the upper extremity of the rectum, the sloughs were confined to the transverse rugæ, the rest of the

mucous membrane being apparently healthy. The examination of the descending colon was next proceeded with. The stomach, with the omentum, being turned upwards on the chest, a portion of the upper part of the ilium, three inches in length, was seen to be united to the colon at the angle of junction of its transverse and descending portions, and, also, to a part of the abdominal wall; beyond this union of the two bowels, which was apparently of old date, and some old adhesions of the liver to the diaphragm, there were no other traces of peritonitis having ever existed. Ligatures being placed around the transverse colon, near its junction with the descending portion, and on the latter above its sigmoid flexure; as also on the two extremities of the adherent convolution of the ilium, these portions of the intestinal canal were removed from the body, together with so much of the wall of the left lumbar fossa as included the artificial anus, made during the life-time of the patient. An inspection of the parts after they were so removed, revealed an opening in the ilium close to that made into the colon, but smaller than the latter; it was also seen that the peritoneal cavity must have been opened as well as the bowel, inasmuch as the peritoneum completely surrounded the colon in this situation, forming a meso-colon an inch in length, by which it was attached to the left lumbar fossa.

Mr. Holthouse remarked that he had brought this case before the notice of the Society, not so much for the purpose of exhibiting the morbid changes in the rectum and uterus, as for the important bearing which it seemed to have upon several points of practice. And first, as regards the error of diagnosis; it is clear that the passage of the bougie was arrested, not by a stricture of the rectum, but by the promontory of the sacrum; and it would be well to bear this in mind when called upon to make explorations in this part of the alimentary tube; for it is highly probable that the present is by no means a solitary example of a similar error having been committed. The existence of a meso-colon to the descending portion of the large intestine, is likewise a point worthy of note, inasmuch as when this obtains, the cavity of the peritoneum must necessarily be opened in making an artificial anus in this situation; and if it be admitted that the principal danger to be apprehended from the operation is the occur-

rence of peritonitis, we are clearly not in a condition to form a just estimate of the relative degree of safety of an opening made in this situation and one in the groin, till we have first ascertained in what proportion of cases a meso-colon is met with.

The possibility of opening the small intestine, either instead of, or in addition to the large, as was done in the present case, is a point that should not be lost sight of in the operation, as such an accident is likely to influence materially the final result.

Mr. HOLTHOUSE, 16th March, 1852.

30.—*A Remarkable Cyst in the Omentum.*

The cyst was found beneath the anterior layer of the greater omentum, in a woman who died unexpectedly, having a very large fibrous tumor of the uterus. It consisted of a highly transparent closed sac, between three and four feet in length, and from a half to one and a half inch in breadth, having a lobulated appearance externally, like that of the distended colon, but in no part subdivided by any approach to complete septa. The sac was fed by numerous vessels running within the omentum, and ramifying over it in every part. These communicated with a large artery and vein, the size of the largest goose-quill, which ran along the greater part of the cyst, and opened into other hypertrophied vessels, especially one artery and vein of equal size passing from the lower border of the stomach down the centre of the omentum. The fluid in the sac was a transparent colourless serum containing numerous flocculi. These, on microscopic examination, showed the ordinary filamentous appearance of fibrinous or albuminous matter, entangling various nuclei and imperfect forms of epithelium, evidently detached from the inner wall of the cyst. Nothing like ova, or like any portions of the structure of the true entozoa, could be discovered in the fluid; nor did the examination of the interior of the cyst membrane (so far as it could be pursued without altogether spoiling the preparation) reveal any more organized structure than that of an epithelial membrane. The peculiarity of the cyst is its anatomical disposition; and if it is to be regarded as belonging to the class of simple serous cysts, it is probably an undescribed variety

of that class. The serous cysts hitherto mentioned by authors as not belonging to the class of animal parasites, have been simply globular structures, in some cases clustered together, or assuming some peculiarity of form from their anatomical relations, but not departing far from the globular type. The remarkable elongation in the present instance, the lobulated form, and the great enlargement produced in the vessels of the parent structure, seem to imply a higher power of independent organization in this than in any previously described simple cyst. The mode of origin of such a structure, especially in the omentum, where non-parasitic cysts are exceedingly rare, appears quite open to speculation. The case is rendered more remarkable by the fact, that, in conjunction with the structure above mentioned, there was found in the cellular tissue of both groins a cluster of globular cysts of the ordinary type; that similar cysts were found in the interior of the fibrous tumor; and that in the velum interpositum, occupying the position of the pineal gland, there was a globular cyst of the size of a bean. The organs of the body were, with the exceptions mentioned, healthy.

Dr. W. T. GAIRDNER, 21st of October, 1851.

31.—*A large Cyst occupying the Cavity of the Pelvis, and containing great numbers of Acephalocysts.*

This cyst, along with the rectum, bladder, ureters, and kidneys, was removed from the body of a man, aged fifty-one, who died of peritonitis, in connexion with extensive disease of the kidneys. The cyst consisted apparently of condensed areolar tissue, and was of the capacity of about a pint and a half. It pressed considerably upon the rectum and bladder, and upon both ureters, for the distance of about three inches of their vesical extremities, though not to their complete occlusion. The remaining parts of these tubes, and the pelves of the kidneys, were considerably distended with urine. At first sight, the cyst resembled a distended and dilated urinary bladder; the true bladder, which was contracted, being like a foreign body in front. The cyst was of considerable density; at the lower part it was of the consistence of cartilage, and was lined by a very thick membrane, which was

soft, white, and easily removable. This internal cyst contained a large quantity of limpid, albuminous fluid, in which floated vast numbers of opalescent capsules, of variable size, containing numbers of the *acephalocystis armatus* (Goodsir.) A small portion of the lowest part of the external cyst was greatly hardened, and had in close connexion with it the remains of shrunken and disorganized acephalocysts, which had become converted into a mass of ochreous-coloured, friable substance. This, when examined microscopically, was found to consist of fat and granular matter, altered purulent matter, &c., changing colour, like bile, on the addition of nitric acid, and not effervescing on the addition of hydrochloric acid. Along the sides of the proper external cyst above described, muscular fibres were conducted from the bladder, giving, at first, the idea that the parietes of this viscus were the original habitat of the entozoa, but it appeared that the cyst, from its intimate connexion with the bladder, had, during its growth, drawn some of its muscular fibres along with it. The bladder was healthy, and contained a small amount of highly albuminous urine. No other acephalocysts were found in the body, but in each choroid plexus of the lateral ventricles was found a substance of the size of a pea, consisting of fat, cholesterine, and a number of large rounded bodies of a greyish colour, and when cloven, exactly like those figured by Dr. Quain in Plate III. of the Society's Transactions for 1850-51. Other small and pellucid bodies and cells of different sizes and shapes also existed in the mass. Dr. OGLE, 18th of November, 1851.

DISEASES, &c., OF THE URINARY AND GENERATIVE ORGANS.

1.—*Stone in the Left Kidney.*

THIS specimen was taken from a man aged fifty-three, who had suffered upwards of twenty years from stricture of the urethra, occasional abscess in the perineum, and retention of urine. On the 19th of September he was admitted into St. Mary's Hospital. The urine passed in drops both through an aperture in the perineum and the urethra; it was alkaline, and contained a good deal of mucus and albumen. No instrument could be passed

through the stricture, which was seated at the bulbous portion of the urethra. As the pain and difficulty in passing the urine were very great, it was thought that a free exit for the discharge of the water might lessen the patient's sufferings. On the 8th of October, Mr. Coulson divided the stricture through the perineum, and easily introduced a catheter, which was retained in the bladder for forty-eight hours. The first effect was relief to the pain; but on the next day it returned, and increased in severity until the 14th, when the man died. There was a wound an inch in length in the median line of the perineum, dividing the bulbous portion of the urethra, which was considerably thickened. In the membranous part there were two openings, one leading to the abscess in the perineum, and the other going towards the pelvis. The bladder was very much thickened, and its mucous surface in several places destroyed. On the posterior surface of the prostate, there was an abscess about the size of a hen's egg, not communicating, however, either with the bladder or the rectum. The left kidney was enlarged, sacculated, and distended with pus, the whole of its proper structure being absorbed. In its lower part there was a large calculus, which occupied nearly the whole of the lower half of the kidney projecting into the infundibula and pelvis. The ureter was very much enlarged and thickened, the mucous membrane being rough, and of a dark colour. About the centre there was a contraction of the canal, and hardness of its coats. The right kidney and other organs were healthy, with the exception of the liver, in which there was incipient fatty degeneration.

Mr. COULSON, 21st of October, 1851.

2.—*Serous Cysts in the Kidney, with some Observations on the Fluid Contents.*

J. B., aged thirty-five, was admitted into St. George's Hospital on the 29th of October, 1851. No satisfactory history could be obtained from him. It was said that he had been ill for a month, and that he was accustomed to drink hard. On admission, the fetor of the breath was intolerable. The pulse was 130, exceedingly feeble; the tongue coated, the expectoration scanty. There was no œdema of the legs; the urine was

passed involuntarily in bed. There was much delirium, and he was often trying to get out of bed. There was extensive dulness at the back of the right lung, with very loud bronchial breathing, and coarse moist sounds, and absence of all healthy respiratory murmur. The pulse increased in frequency, the breath became more fetid, and he died October 31st.

Post-mortem examination, by Dr. Ogle, fourteen hours after death. The body was emaciated but well formed. Height five feet six inches. There were extensive and very firm adhesions in the left pleural cavity; slighter adhesions towards the apex of the right cavity. Both lungs had a very dark bluish black surface, from an immense quantity of dark deposit, in small shot-like masses beneath the investing pleura, which was roughened by prominent tuberculous deposit, around which the dark matter was generally deposited. On section, both lungs contained large quantities of scrofulous matter. The tubercles, which varied much in size, were generally surrounded by the black deposit. This was especially the case in the right lung, where, in the posterior parts, vomicæ had formed, with definite fibrous areolar parietes, containing matter, for the most part of a very dark brownish colour, very fluid, and of a most offensive gangrenous smell. Some of the tuberculous matter, instead of softening, had become consolidated, and presented pasty-like deposits; but these were rare. In its posterior and central parts the lung was perfectly hepatised around the tubercles and vomicæ. The upper part and margins of both lungs were free from consolidation, but full of frothy fluid. The bronchial tubes throughout were highly congested. The heart was healthy, and weighed $10\frac{1}{2}$ ounces. The abdominal cavity contained a small quantity of yellow fluid. The liver was soft, pale, and very fatty, weighing 3lb. 5 ounces. The kidneys weighed together 11 ounces 7drs. The right kidney was rather larger than the left. Both were perfectly smooth on the surface. The capsules being easily removed, numbers of small cysts, of various sizes, were seen. They varied in size from a pin's head to a walnut. On section, they were seen extending into and destroying the cortical structure. Some contained a gummy, soft, solid matter, of a yellowish colour. Others contained perfectly liquid contents. One cyst, the walls of

which were fibrous and white, was punctured, and from it about a drachm of clear, offensive-smelling liquid was obtained. Examined by the microscope, scarcely a single blood-globule could be found. No epithelium or crystals of any kind could be seen. The liquid was neutral to test paper. The specific gravity was about 1005. It contained no trace of uric acid. No earthy phosphates. Dr. Bence Jones could not satisfy himself that any urea was present. There was some salt of ammonia present, and a very considerable quantity of albumen. Under the microscope the kidneys appeared healthy. The spleen was soft, weighing $3\frac{1}{2}$ ounces. The other viscera were healthy.

Dr. BENCE JONES, 4th of November, 1851.

Report on this Specimen.—As might have been expected, microscopical examination displayed a considerable number of minute cysts. They were not uniformly scattered; so that, while some sections contained none, others were thickly studded with them. They (that is, those that were more particularly microscopic objects) were of nearly uniform size, some being as large as Malpighian bodies, but the majority somewhat, though not much smaller. They had a peculiar pellucid appearance, were round or oval in outline, admitted of somewhat easy isolation from the surrounding parts, were elastic, so that they immediately recovered from the effects of pressure, and even when injured by the needle, retained, for the most part, their original form. On examination with a quarter of an inch object-glass, they were seen to present a somewhat obscure concentric marking, which was certainly in some cases, and probably in all, due to a laminated arrangement of the walls, which were usually very thick, and in one instance at least occupied two-thirds of the diameter of the cyst. The walls of the cysts were somewhat granular, in addition to being laminated, and their contents were chiefly made up of molecules and granules of oily matter; in a few cases they were dense and dark, and had an orange tint. Acetic acid caused a slight degree of expansion and transparency in them, but no other change. Though the cysts somewhat resembled Malpighian bodies, they were for the most part easily distinguishable from them. They

were smaller, more uniformly transparent, either when seen on the face of a section or at its margin ; and, whether at the margin or isolated, they retained their natural form and appearance ; whereas a Malpighian body in the above situations almost invariably becomes free of its capsule, which is either entirely lost or remains loosely attached to it as a thin, almost structureless membrane ; and, again, the capsules of the cysts were thick and laminated, and their contents presented no appearance of a Malpighian tuft ; so that, taking all these facts into consideration, it is quite certain they were not Malpighian bodies, at least not healthy ones. How cysts in the kidney arise I am unprepared to say. Neither in this, nor in any other I have examined, have I been able to verify the opinion of Dr. George Johnson, that they arise in the tubuli uriniferi. I have never seen a cyst continuous with a tube ; and I imagine that that must be seen before this view can be considered proved. Neither did I see here, as I have done in others, any appearance which would warrant me in believing that they were fresh formations arising from cytoblasts, as is stated by Mr. Simon, Mr. Paget, and others ; there was not that variety in size and appearance which would be expected in cysts having such an origin ; and, lest I have conveyed the impression (in my anxiety to distinguish between them and Malpighian corpuscles) that I lean to the belief, that, in the kidney under consideration, they arose in those bodies, I may say, that that idea has nothing in its favour beyond the uniformity in size of the smallest cysts, the occasional difficulty of distinguishing one from another, and their (I believe) uniform origin in the cortical substance. With respect to the larger cysts I may remark, that their walls presented a faintly-granular and fibrous appearance ; but I was unable to distinguish any epithelial lining, and the only microscopic characteristic of their contents was an appearance of molecular matter, in many places aggregated into masses. The other parts of the kidney, Malpighian bodies and tubules were healthy, so far as I could discover. One could hardly expect that so many cysts should arise in a healthy kidney ; but, if it were diseased, the differences between it and a healthy gland were not sufficiently well marked for me to distinguish them.

Dr. BRISTOWE, 18th of November, 1851.

3.—*Two Kidneys containing Serous Cysts.*

These specimens were taken from a fine, hale, hearty Greenwich pensioner, aged ninety-three, who died of pneumonia after a few days' illness. The other organs of the body were healthy. The prostate gland was somewhat smaller than natural. He had no symptoms of kidney affection, but the condition of the urine was not observed. He had gonorrhœa eighteen months before his death. On the surface of the left kidney there was a large cyst, which contained $1\frac{1}{4}$ ounces of yellow clear fluid. On examination with the microscope, some cells like mucous globules, but larger, full of granular matter, rarely nucleated, were seen. The fluid was slightly alkaline from volatile or fixed alkali; specific gravity, 1012·14; contained a trace of carbonates; with ammonia gave a slight crystalline precipitate of phosphate of ammonia and magnesia. Contained very little, if any, alkaline phosphate, very little sulphate, much albumen. From about six drachms of the fluid, no positive proof of the presence of urea could be obtained. Two drachms of the fluid did not give even microscopic evidence of uric acid; 1,000 grains of fluid contained 971 of water, and 29 of solid residue, which was chiefly albumen.

Dr. BENCE JONES, 18th of November, 1851.

Report on these Specimens.—The kidneys presented a considerable amount of disease. The tubuli were in some cases natural, but in the majority they were more or less altered. Of these latter, some were filled and dilated by an excess of brownish epithelium, the individual cells of which were loaded with granular matter, or distended by distinct refractile molecules of oily-looking fluid. Others were blocked up by blood, in various stages of disintegration, which had doubtless been effused by a rupture of the corresponding Malpighian plexuses. Their contents were opaque, granular, more or less tinged by the colouring matter of the blood, and in some cases giving distinct evidence of the presence of blood-corpuscles. The Malpighian bodies appeared for the most part healthy; but some, without being materially altered in size, were highly opaque, so that it was difficult or impossible to trace the vessels within

them. The opacity was due to a large amount of granular matter, apparently seated between the vessels and their capsules, and most probably caused by an effusion of some of the constituents of the blood. There was an abundance of cysts throughout both kidneys. In almost every section examined by the microscope, they were present in considerable numbers; sometimes solitary, but frequently clustered. By careful manipulation, they were isolated, and moved about in the field of the microscope. They varied greatly in magnitude, the smallest being little larger than renal epithelial cells, the largest being about the size of Malpighian bodies. They were all globular or ovoid, transparent and refractile. In all there was a distinct and perfect wall, and in many it was of some thickness. Occasionally the thickness of the wall was indicated by a layer of molecules lining its interior. The contents sometimes so far varied from their ordinary transparent character as to be faintly granular; and rarely, this granularity took on the form of one or two concentric layers, situate a little distance from the cyst-wall—an appearance possibly in part due to the endosmose of water during the examination. The wall of the large cyst, from which the fluid that was analysed was taken, presented a fibrous appearance, but no epithelial lining could be detected. Some flattened Malpighian bodies and tubules were visible here and there, connected with its outer surface.

Dr. BRINTON AND Dr. BRISTOWE, 2nd of December, 1851.

4.—*An Example of a Single Kidney being found in the Body.*

The kidney was found on the left side of the body, and was about twice the weight and size of an ordinary one. It had its own suprarenal capsule; and nothing, on microscopic examination, was found in it worthy of note, excepting slight alteration in the contents of the uriniferous tubes. On the side where the kidney was missing there was, contrary to expectation, a “should-be” supra-renal capsule, and a ureter also, though to what connected could not be ascertained, as it had been inadvertently divided during the *post-mortem* examination, before the peculiarity in question was noted. It had not been in connexion

with the existing kidney nor with either capsule. There are but four or five such instances mentioned in the St. George's Hospital *post-mortem* records. Dr. OGLE, 16th of December, 1851.

5.—*Two Specimens of Cystic Oxide Calculi.*

They were taken from the kidneys of a woman, of whose history but little was known. In early life she was said to have passed a small calculus from the bladder. She subsequently became insane, and was for some time in confinement. After leaving the asylum she became intemperate in her habits, and though suffering in various ways from general derangement of health, was not known to have had any symptoms specially referable to the urinary organs. She died without any dropsical symptoms or cerebral affection. Both kidneys were enlarged, and their pelves much distended, from the impaction of calculous matter, and especially from the presence of two calculi,—one in each kidney, of considerable size. These calculi were surrounded by coagulated blood, and were of an irregular figure, being moulded to the shape of the distended infundibula of the kidney. The larger one measured two inches in length, and rather more than one in breadth at its larger extremity; its weight was 204 grains. Of a very irregular form; it closely resembled a piece of crystallised ginger, having a yellow smooth waxy appearance externally, and a crystalline character internally. The surface of one of its nodules was white in colour, smooth, and polished, apparently from friction. The smaller calculus was of a similar irregular form, but differed considerably in its general aspect. It measured $1\frac{1}{2}$ inch in length, and $\frac{3}{4}$ inch in breadth; and weighed 116 grains. Its external surface, blackened by dried blood, was rough and channelled, and presented the general appearance of being worm-eaten; it was of much less density than the larger one. It had, however, the same crystalline structure. Both calculi, on analysis, appeared to consist of pure cystic oxide. Specimens prepared for the microscope by Mr. Rainey, of St. Thomas's Hospital, were also exhibited by Dr. Bennett, and displayed very beautifully the characteristic crystals of cystic oxide. Dr. RISDON BENNETT, 16th of December, 1851.

6.—*Examination of some Gelatinous-looking Matter taken from a number of Cysts in a Kidney.*

On removing the capsule the cysts protruded from the surface : they were punctured, and the soft solid substance was removed by the point of a knife.

Examined by the microscope, much very fine granular matter was seen mixed with some large, round, ovoid masses indistinctly laminated. Other much smaller masses were seen quite clear, without any granular contents. No blood-globules could be found, and no crystalline matter.

Heated on platinum the substance swelled up, and took fire with difficulty ; the flame was soon extinguished. A bulky coal was left, which burnt away, leaving only a trace of alkaline ash. When heated with cold water, a slightly milky solution was formed, which was neutral to test-paper, did not become clear with ether, but became perfectly so with liquor potassæ.

When the solution in water was heated, it coagulated, and the coagulum did not redissolve when the heat was continued.

On adding nitric acid to the solution it gave a yellowish coagulum, and on the application of heat the precipitate entirely dissolved ; on cooling the solution, the precipitate again formed, and again became clear on boiling.

When the contents of the cyst were treated with nitric acid, no trace of uric acid was detected.

From this examination it follows that the contents of the cysts consisted chiefly of albumen, which slightly differed from the albumen of the blood in its reaction with nitric acid and heat.

Dr. BENCE JONES, 20th of January, 1852.

7.—*Morbid Deposits of indistinct character in the Kidney.*

Both kidneys were very dark and engorged, and in various parts of their substance, though chiefly in the peripheral portions and appearing on the outer surface, were deposits of a light yellow, friable character. These were, for the most part, arranged in little masses, as if by the union of small points of deposit ; but in some of the pyramidal parts of the kidney they

were arranged in a linear direction. In one or two parts near the surface, softening had occurred to some extent. On examination by the microscope, the deposits had the appearance, in all respects, of so-named "scrofulous deposit" the tubules of the kidney itself being also much altered as to their contents and character.

The patient from whom the kidneys were taken, a woman, aged twenty, was admitted into St. George's Hospital with a quick, weak pulse, dark-brown, dry tongue, and other indications of a typhoid condition. She stated that without any distinct pain, she had been ill about five weeks, complaining originally of shivering and diarrhœa, and latterly of much vomiting in addition to the diarrhœa. She had had an interval of convalescence of about two weeks' duration, but again relapsed. She died about fourteen days after her admission, the same class of symptoms continuing, and without the appearance of any petechiæ on the skin.

On *post-mortem* examination the blood was found to be very fluid, and ulceration of the ilium with indications of low pneumonia existed. Moreover, the spleen presented one or two patches of extravasation of blood into its texture, but in no other organ than the kidney was any morbid deposit or growth found to exist.

In this case the morbid deposit being exclusively confined to one organ, together with the presence of a peculiar condition of the system, renders it worthy of consideration: How far other states of the system than the one usually recognised as scrofula may have the power of impressing any exudation with a form simulating that of scrofulous deposits?

Dr. OGLE, 17th of February, 1852.

Report on this specimen. — The specimen consisted of a kidney, the peculiarity of which was stated to consist in the circumstance of its being studded with numerous deposits of tuberculous-like matter, which matter was not found in any other organ of the body.

The portion of the kidney which I took for examination, comprised a part of each of the two divisions of the organ. On the

surface the deposit consisted of small, irregular, striated masses, varying from a line to a line and a half in diameter, and separated by spaces varying from one to three lines in breadth. These masses were raised above the surrounding surface of the organ to the height of from a quarter to half a line; they were of a faint yellow colour, with a smooth surface. Some of these masses presented small excavations, and, it appeared that the central part had become softened, so that it escaped in a semi-fluid form as soon as a section was made. In some parts this deposit was arranged in lines, running from the surface of the organ to the pyramidal masses, and not unfrequently these lines were prolonged to a distance of half an inch through the substance of the latter. These portions of deposit were found to be very friable, so that particles could be removed with the point of a needle.

When submitted to microscopic examination, this substance was seen to consist of cells, having a yellow colour, varying in size from that of a blood-disc to that of four or five times its diameter. These cells differed in shape, some being irregularly oval or somewhat round, others triangular, others having many angles. No distinct nuclei were observed in their interior, but some of them contained granular matter. Interspersed between these cells, also, was a considerable quantity of granular matter. Upon the application of acetic acid, the globules became transparent, and did not show the presence of any nuclei. The question I now proposed to myself was: Do these cells present characters sufficiently definite to enable the observer to decide upon their nature? Does the description given by myself agree with that of any morbid growth by other pathological investigators?

I have replied to both these queries by quoting the definition of tuberculous matter from some well-known observers, viz., Lebert, Vogel, Gerber, Gulliver, Addison, and Hasse. M. Lebert says, "The constant elements of tubercle are, a large quantity of molecular granules, perfectly round; these surround on all sides the globules which are certainly characteristic of, and proper to tubercle. Of these globules the following is a condensed account. In form they are rarely round, their contour is

irregular, sometimes approaching the spheroidal, sometimes the oval form ; they are ordinarily irregularly angular and many-sided, the angles and edges being rounded. Their colour is yellow ; their interior is irregular, and of an unequal consistence, which gives them a spotted appearance, independent of the granules which they enclose ; they never contain any true nuclei, although they sometimes present in their interior an irregular appearance of a small vacuity resembling a nucleus." Upon this point M. Lebert is most decided, having investigated it with much care, aided by the use of chemical agents. "The diameter of the corpuscles varies much. The granules and corpuscles are connected by a hyaline mass."

Mr. Gulliver says, "It most frequently happens that tubercle exhibits no regular structure, nothing being detected but granular matter, minute sphericles, and shapeless flakes and fragments. In smaller tubercles, corpuscles are often seen, having much the character of cells or their nuclei, the envelopes are either absent or indistinctly blended with a minutely granular base."

The following description is condensed from Vogel. "There are," he says, "Firstly, a transparent, amorphous, vitreous stroma, which resembles coagulated fibrine. Secondly, minute granules, chiefly of a roundish form, and of a brownish colour ; also others consisting of fat. Thirdly, imperfectly developed cells or cyto-blasts, with or without nucleoli ; the former are partly soluble in acetic acid, the latter are insoluble. The cells are generally very imperfectly developed, and a distinct nucleus can seldom be recognised. The cellular formations are sometimes entirely absent. The degree of organization of the tubercle depends on the prevalence or deficiency of their cell-structures." Pp. 279, 280.

Dr. Addison's description is as follows :—"Round and irregular-shaped corpuscles, much larger corpuscles filled with granules, corpuscles in which the central portion had assumed various irregular shapes, corpuscular tunics from which the granules had either entirely escaped, or were lying partially without the ruptured tunics, and a great multitude of molecules and granules, some of which adhered together in little rounded masses

without any tunics."* ("Transactions of Provincial Medical and Surgical Association.")

Hasse says of these cells, "They are spherical, occasionally oval, bean-shaped, or serrated cells, some smaller, some larger than pus cells, and somewhat flattened; the cells are filled with an indefinite number of granules."

If the descriptions here quoted be carefully analysed, no one can, I think, fail to be convinced that the matter examined by myself was tuberculous matter, and that it does present such distinctive characters as to enable the pathologist to recognise it whenever it is presented to him. In order firmly to establish this last position, I have proceeded a step further in the inquiry, and I have placed, side by side, the delineations of tuberculous matter by Lebert, Vogel, Gulliver, Dalrymple, and myself. (See Plate VIII.) Making due allowance for the different stages and conditions of tuberculous matter, and for the magnifying power used, these drawings corroborate, in a marked degree, the opinion that tubercle-cell possesses well-defined characters, recognizable by means of the microscope. The drawings of the structure of the deposit in the kidney referred to me, correspond completely with those of Lebert; so does the drawing of tuberculous matter found in the testicle, which also presented the peculiarity of not being discovered in any other organ of the body. The only point of discrepancy, and it is one of great importance, is respecting the existence of nuclei in the cells. This point is, I think, satisfactorily settled by the application of acetic acid. Bodies which, in the specimen referred to me, looked somewhat like nuclei, disappeared upon the use of the acid. M. Lebert's opinion appears to me to be correct, *viz.*, that this appearance is due sometimes to the presence of granules in the interior of the cells, at others, to the adhesion of parts of the walls of the cell to each other. I have no doubt when this subject is re-examined by the few observers who seem partially to favour the opinion as to the presence of a nucleus in the tubercle-cell, that they will agree with Lebert and others, of the absence of a nucleus; and in this as in many other points upon which pathologists at present

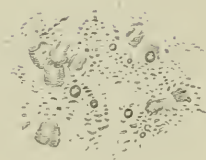
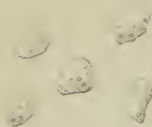
* For graphic illustrations, Dr. Addison refers to Gerber's General Anatomy and Mr. Gulliver's Appendix.



M Liebert X 600

M^r Gallwey X 800

M Vogel X 820

M^r Dalrymple X 650
 cheesy deposit cells disintegratedM^r Toyne X 450
KidneyM^r Toyne X 450
TesticleM Liebert X 600
Acetic AcidM^r Toyne X 450
Testicle Acetic Acid.



seem to be at issue, there is no doubt that careful and prolonged investigation is throwing sufficient light to enable us to arrive at positive results.

I will conclude these remarks by a few words respecting the interpretation of the facts arrived at from the examination of the tubercle-cell. "What place," says Lebert, "does it occupy among pathological cells? If it be true that a complete cell is composed of a cellular membrane, and of one or two nuclei, and of nucleoli in the interior of these nuclei, we are, at the same time, convinced by a great number of observations upon pathological cells, and upon those that are found in healthy organs, that this formation is not general, and that it is proper to only a certain number of elementary globules. The tubercular cells," adds Lebert, "appear to belong to one of the most simple forms of pathological cells, composed of a membrane as an envelope, with semi-liquid contents, or having a certain number of molecular granules irregularly distributed in their interior." I may add, that Dr. Handfield Jones, while agreeing that these cells contain no nuclei, regards them as degenerated nuclei themselves.

Mr. TOYNBEE, 2nd of March, 1852.

8.—*Great Enlargement of the Middle Lobe of the Prostate Gland, with much increased size of the Lateral Lobes of the organ.*

The patient, aged eighty-seven, from whom the specimen was removed, had died comatose. He had been for many years helpless and bed-ridden. He had suffered occasionally from retention of urine, and this secretion was generally ammoniacal, and loaded with pus and mucus.

The capacity of the bladder was unusually enlarged, and presented a well-marked specimen of that columnar condition which obtains when a continued obstruction to the free egress of the urine is present. The mucous membrane was but slightly disorganized. The organ contained a moderate quantity of purulent offensive urine. The prostate gland was greatly enlarged, and measured two inches and three-quarters across. The middle lobe projected considerably into the interior of the bladder, in consequence of its much increased volume, and was free from

abrasion on its surface. The base was broad, and its form not much unlike a chestnut, but about double the size, with the widest part projecting upwards and backwards. The mucous membrane of the bladder in its immediate neighbourhood was healthy. The urethra in its whole length was free from stricture or other disease. The ureters were considerably dilated. The left kidney was irregular on the surface, and presented on section a multilocular appearance in consequence of the dilatation of the infundibula and calyces. All the tubular portion appeared to be removed, whilst altogether a considerable part of the cortical remained. The opposite organ was larger than natural, and seemed to be affected with sero-cystic disease. The enlarged prostate, examined microscopically, was found to consist of the normal structure of the gland, with some fibrous tissue in addition.

Dr. BERTH, 20th of January, 1852.

9.—*Calculi in the Bladder and Ureter.*

A man, aged forty-five, had suffered under symptoms of stone in the bladder for more than twelve months. He placed himself under a quack, who promised to cure him by the globulistic process. He did not, however, confine himself to the use of globules, but passed, or endeavoured to pass, a sound or some other instrument into the bladder; this was followed by the formation of abscesses around the neck of the viscus, which burst in several places, one opening being at the bottom of the scrotum. At this time he placed himself under Mr. Webber's care; but with these local symptoms others had supervened, marking extensive disease both of the heart and kidney; from these combined maladies he gradually sank.

On *post-mortem* examination the pericardium was found filled with fluid, and its surface heavily coated with recently exuded lymph. The kidney was large, the cortical substance extremely congested, presenting appearances of ecchymosis; whilst the tubular portion was not similarly congested but mottled by yellow and apparently linear deposits, increasing in quantity as they approached the points of the pyramids. The lining membrane of the pelvis was also congested, whilst the capsule was

thin, and but very feebly united to the renal tissue. The bladder was small, healthy, and contained a moderately-sized lithic acid calculus. The ureter of the affected kidney also had a small calculus impacted about an inch from the pelvis; but neither the pelvis, the kidney, nor adjoining portion of ureter were dilated, so that the descent of the calculus had been of recent date.

Mr. GAY for Mr. WEBBER, 18th of May, 1852.

10.—*Dysmenorrhœal False Membrane.*

A lady, aged thirty-six, had seven years ago a difficult and premature labour, since which she has constantly suffered from uneasiness in the hypogastrium, incontinence of urine, painful feeling in the rectum, with occasional muco-purulent discharge. On examining the uterus two years ago, an ulcer of the size of a halfpenny, with elevated edges and dirty greyish substratum, was seen extending a little way within the lips of the os; the vagina was not ulcerated, but was unduly vascular; a small fissure also existed in the rectum, which had, perhaps, been occasioned by the pressure of the enlarged os uteri; her general health was affected, and there was emaciation. The ulcer of the os which was cured by repeated application of nitrate of silver at intervals of four days, has not returned; but the os has remained congested and enlarged. The fissure of the rectum has been tolerably well for the last eighteen months; but during the two last monthly periods she has passed membranous coagulations tinged by blood.

These membranous productions, common in congestive dysmenorrhœa, are usually regarded as consisting of lymph, or false membranes, as they are often termed. I certainly expected to find the well-known structural peculiarities of fibrinous films when I began to examine them, and was not a little surprised to find that in every part they consisted entirely of desquamated epithelial scales. These were mingled with numerous altered nuclei and some blood-globules; they had the form of most perfect scales, and, for the most part, were perfectly formed and mature. (See Plate IX. No. 1, which shows scales of epithelium exactly resembling those of the buccal surface. The

films and flakes are made up entirely of these scales, superposed in layers upon each other; most of them contain molecules of opaque oily-looking matter, and one (*a*) is figured with a large oil-drop in its substance; there are a very large number of free nuclei mostly elongated, some of them developed into small granular globules.)

I have had, through the kindness of Mr. Coulson, the opportunity of examining these membranous films twice: the first time they were composed of scales just resembling those of the healthy buccal mucous membrane; the second time the scales contained a great many molecules of oily matter which gave them an opaque aspect.

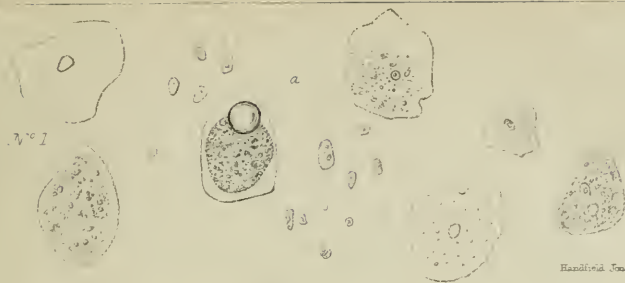
The opinion which Dr. Simpson has expressed respecting the membranous films thrown off in dysmenorrhœa, viz., "that they are not simply a fibrinous or inflammatory exudation," but "as the exfoliation or detachment of the mucous membrane of the uterus" is remarkably confirmed by the above observation. If in future examinations the membranous films should always be found to consist of scaly epithelium, it will go far to prove that their production takes place not in the general cavity, but at the lower half of the neck of the uterus, the canal being only so far lined by scaly epithelium, after which the ciliated begins, and is continued to the extremities of the Fallopian tubes.

Dr. HANDFIELD JONES, 3rd February, 1852.

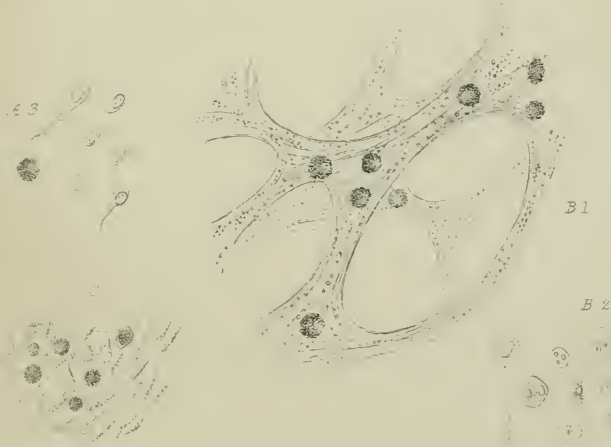
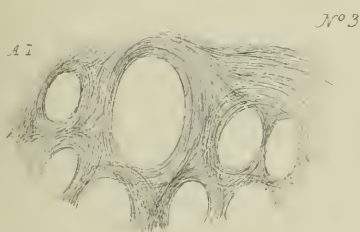
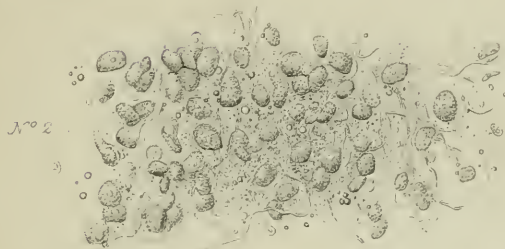
11.—*Membranous Menstruation.*

A lady in moderate health, aged thirty, had been married several years, but had never been pregnant. Before and since her marriage she had been accustomed, at each catamenial period, to pass a fleshy mass of variable size. Beyond this and the persistence of sterility, there was nothing remarkable in the uterine functions. She suffered no unusual pain at the periods, nor was the amount of secretion excessive. On one occasion only she had had an epileptic seizure during the catamenial flow.

On the last occasion a mass of about the size of an almond was passed; this appeared to have taken the shape of the cavity of the fundus uteri, as it was somewhat triangular in form; it was

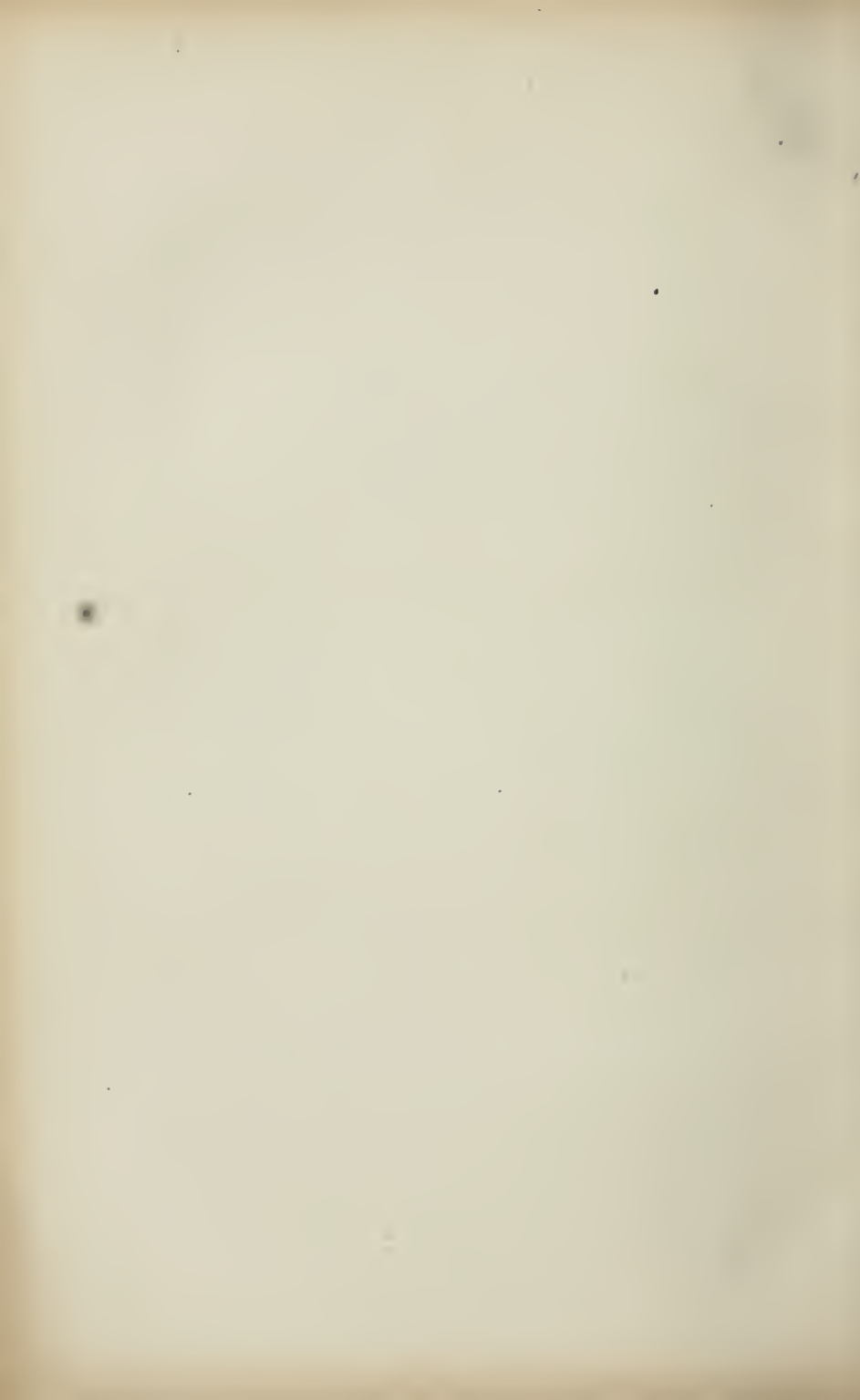


Handl. Junc. M.D. 82



J. S. Briestowe M.B. 82.

- N°3
- A 1. Matrix of most solid portions with the cells washed away Case of A.L.
 - A 2. A portion of the same with the cells remaining
 - A 3. Isolated cells from the same
 - B 1. Jelly-like part from breaking down portion of tumour.
 - B 2. Cells from Encephaloid substance from some part
 - C. Jelly-like substance from projecting tubules



smooth and dense externally, but was found to be soft internally, and to have the appearance of a cavity in the centre.

Microscopical examination.—The mass was found to consist entirely of fibrous material, resembling the filaments of fibrine, arranged in bands, and studded with myriads of granular corpuscles of various sizes, similar to exudation corpuscles. See Plate IX. No. 2. The corpuscles could be obtained by themselves, or they could be washed out of the fibrous element, so as to show the filamentous structure alone. The mass had, probably, been thrown out upon the uterine surface in the form of lymph; and an attempt or progress towards organization had been made. The specimen was examined by Dr. Handfield Jones and Dr. Hassall.

Dr. Tyler Smith considered the present structure a type of membranous menstruation. It had evidently been discharged either from the canal of the cervix, or from the cavity of the fundus uteri,—probably from the latter. He observed, that on a former evening his colleague, Dr. Handfield Jones, submitted to the society a membranous mass discharged by a dysmenorrhœal patient, which consisted chiefly of scaly epithelium. (See page 391.) He had himself been recently engaged in an examination of the epithelium of the uterus and vagina, and he found that the scaly epithelium did not extend into the uterus; it covered the vagina and the external portion of the os and cervix uteri, but did not extend into the interior of the uterus. At the labia uteri, cylindrical epithelium commenced. He submitted that the epithelial discharge was probably caused by the complication of vaginitis with dysmenorrhœa, and not true membranous menstruation, in the case examined by Dr. Handfield Jones; the discharge of large quantities of scaly epithelium being frequent in the vaginitis of gonorrhœa, and in other forms of vaginal irritation or inflammation. Dr. TYLER SMITH, 6th April, 1852.

Dr. R. Quain observed, that the cases referred to by Dr. Tyler Smith, illustrated the usefulness of the microscope as a means of diagnosis. The President, in assenting to this remark, observed, that the subject was important, not only as a means of diagnosis, but in a therapeutical point of view; vaginitis requiring a different treatment from diseases of the uterine cavity.

12.—*Rupture of the Uterus, complicated with a Hand Presentation.*

A midwife was in attendance on the subject of this case, aged thirty-nine, who said that labour had commenced three hours before Dr. Black saw her, that she had ruptured the membranes just before sending for him, and that she did so in consequence of finding it a hand presentation. On examination, he found the child alive, and the left hand presenting over the head; the os uteri fully dilated; pains slow and feeble, the woman being apparently tolerably comfortable. He returned the hand, after which the head descended a little. Labour progressed for about nine hours from the commencement, when the head presented at the external orifice. After this, no further advance took place; the pains ceased entirely, and did not return; and the patient became extremely feeble. The midwife administered ergot of rye, and, finding no further advance, sent again for Dr. Black, who, late in the evening, found the patient much exhausted, and without any expulsive efforts. He at once applied the short forceps, and delivered her of a dead child. Placenta came away spontaneously three or four minutes after delivery. The pulse rose, and she became more comfortable. An opiate was administered. On the next day he saw her, at eleven A.M. She had then a pale, anxious countenance, with an appearance of collapse. Complained of no abdominal or other pain, nor had she experienced any particular sensation, as of anything giving way; pulse small, weak, and frequent. Administered stimulants, &c. There had been no bleeding from the vagina. She gradually sank, and died at one o'clock, P.M.

Post-mortem examination next day—Abdomen enormously distended; peritoneal cavity filled with blood containing imperfect coagula, in all from two to three quarts. At the posterior part of the uterus, at the junction of the body with the cervix, was a transverse rupture, three inches in length, entirely through the muscular parietes, the uterus itself being imperfectly contracted. Dr. Black suggested the difficulty and importance of deciding the exact period at which the rupture in this case occurred.

Dr. J. H. BLACK, 21st October, 1851.

13. *Fatty Degeneration of the Uterus after Parturition.*

S. F., aged forty, mother of three children, was admitted into St. Thomas's Hospital on the 23rd of December, 1851, and died the next day. Three weeks before admission she had given birth to a still-born child. For about a week after this event she had considerable flooding. And about a week before her death first began to complain of abdominal swelling and pain. At the *post-mortem* examination there was found a considerable degree of peritonitis with effusion of lymph. The colon was enormously distended with gas. The uterus was large, measuring about five inches in its vertical diameter—its cavity and os were dilated, its walls from half an inch to three quarters of an inch thick—they were soft, flabby, and of a pale pinkish tinge—its veins were, for the most part, healthy, but some were filled with a soft, yellow, opaque, fibrinous substance. The mucous membrane was congested, especially that of the os, and at the upper and back part of the uterus for the extent of about one square inch and a half it presented a dark, discoloured, sloughy appearance; this being doubtless the part to which the placenta had adhered. There was recent pericarditis; also effusion of pus into the left knee-joint, and probably into others, but they were not examined. The remaining organs were healthy, or nearly so, there was no deposit in the lungs or liver.

Dr. BRISTOWE, 3rd of February, 1852.

Report on this Specimen. — In thin sections of this uterus, made as much as possible parallel with the muscular fibres, and examined under the microscope within thirty-six hours after death, these fibres are seen mixed with roundish corpuscles, and particles of oil of various shapes and sizes. At the edges the fibres are most distinct, and being in some parts separated completely from granular matter, allow of the closest examination. Comparing them with the muscular fibres of the uterus immediately after the expulsion of the fœtus, I find that the former are so much shrunken as to be only about one-fourth the breadth of the latter, and they are so soft that their length cannot be determined in consequence of their breaking up into

fragments of different lengths under the force necessary to isolate them. In most of the fibres minute molecules of oil are discernible in some form or other, and in many there are distinct globules of this fluid placed generally in a single row all along the middle of a fibre, and retained in their place by its transparent membranous exterior, which has not yet undergone this molecular change. (See Plate V. fig. 1.)

As respects the corpuscles before mentioned, these are seen in all parts of this uterus mixed with the muscular fibres ; they are of a rounded form, averaging about $\frac{1}{8000}$ of an inch in diameter, and in some parts appear to be held together by indistinct fibres ; their contents are more or less granular, but still they have a transparency and degree of brightness indicative of the presence of oil.

Portions of this uterus, after having been dried, were digested in sulphuric ether, which being allowed to evaporate on a slide of glass afforded a considerable residue of oil.

The fatty degeneration is not confined to particular parts of this uterus, but sections of every part exhibit the same condition of the muscular fibres though in a different degree, the deeper fibres being probably in a more advanced stage of disintegration than the superficial ones. The microscopic preparation shows the fatty degeneration in different stages.

That there is a fatty condition of the muscular tissue of this uterus is too evident to admit of doubt with those who have taken the trouble to examine the specimen or the uterus from which it was taken ; and, as the organ is in a state of inflammation, it may seem equally obvious that the fatty disintegration of its fibres is the effect of inflammation, and therefore a truly pathological state. However probable the correctness of this conclusion may appear, there is, I think, some reason for doubting its accuracy, as from some observations which I made upon the change taking place in the fibres of the uterus during uterogestation, published in the "Philosophical Transactions" for 1850, I was led to expect that just such a change always takes place in the muscular tissue of the uterus after delivery, and therefore that it may be in this case also normal rather than abnormal. As this question can only be decided by the exami-

nation of uteri at different periods after delivery, and as such opportunities are too rare to occur, in sufficient number, to one individual to enable him to decide it by personal examination, I have, through the kindness of Dr. Bristowe, brought the subject before the Pathological Society with the conviction that among so many cultators of pathology, cases will soon occur from which the question will be decided. As only a few words are necessary to explain the reasons upon which this opinion is founded, I will very briefly give them. From the comparison of the impregnated with the unimpregnated uterus, the muscular fibres of the former seem, all of them, to be merely the developed germ-fibres which composed the greater part of the walls of the latter. The unimpregnated uterus, according to this view, being little more than an assemblage of embryonic nucleated fibres, wholly inactive, until after the reception of the ovum, when, being excited by an appropriate stimulus, and called into active operation, they become developed, their development going on simultaneously and proportionally to that of the ovum contained within it, so that the fibres of the uterus, and the various tissues of the fœtus having started, as it were, from the same point, and advanced with the same speed become matured together, and therefore when the one has arrived at a state requiring to be expelled, the other has acquired the utmost degree of fitness to effect its expulsion. Now, after the expulsion of the fœtus, since, according to the laws of development, it is impossible that these fibres of the impregnated uterus can return again to their primitive or embryonic condition, they must necessarily become absorbed; and as all tissues, before being taken back into the system, undergo a molecular disintegration, and become, either in whole or part, according to their composition, converted into oil, so it appears to me that this same change is going on in the muscular fibres of this uterus, and, that the fatty degeneration, so apparent in these fibres, is, at least in part, if not altogether the effect of a natural and healthy process. Dr. BRISTOWE for Mr. RAINEY, *3rd of February, 1852.*

14.—*Deposit of Tubercle in the Uterus, Fallopian Tubes, and Peritoneum.*

The two preparations (the one a portion of the small intestines, the other the uterus and appendages) were removed from the body of an unmarried female, twenty years of age, of ordinary stature, and not emaciated, who died three weeks ago, in St. Thomas's Hospital, without the possibility of any satisfactory history being obtained, or attention being specially directed to the abdominal symptoms, which were slight. The writer was not aware if there had been any discharge from the uterus.

Post-mortem examination.—On opening the cavity of the abdomen, strong adhesions were found in almost every part, and a small amount of slightly (if at all) turbid serum. The great omentum was strongly adherent to the abdominal parietes in front; the convex surface of the liver was so closely and firmly united to the diaphragm, that they could not be separated, and the intestines were everywhere attached to one another by strong bands and filaments of cellular tissue. Besides this, the peritoneal surface, together with the adhesions, was thickly studded with nodules of tuberculous matter, varying in size from that of a filbert to scarcely visible points. The largest of all were very irregular, and nodulated. Those of intermediate size (between that of a pin's head and that of a pea) were more or less rounded, and either sessile or pedunculated or developed apparently in the adhesions themselves. Most of them presented patches of black discoloration, and this was so far of use that it enabled one to recognise the deposit in its earliest stage. The mesentery, like the other parts of the peritoneum, was studded with tubercles, but the mesenteric glands, as far as they were examined, appeared healthy. The stomach and great part of the intestines were healthy; the solitary glands of the large intestine were unnaturally distinct, and their orifices remarkably large and evident. In the sigmoid flexure was an ulcer, about an inch in diameter, with a sinuous, well-defined margin, and small patches of mucous membrane still adherent to its surface. The liver was somewhat enlarged, pale, soft, coarse in texture, and fatty. The spleen was of natural size, remarkably firm, of a dark colour, and presented

on section a slight degree of translucency. The kidneys were pale, but healthy. The uterus and its appendages were the seat of extensive tuberculous deposit. The Fallopian tubes were shorter than natural, about one-third of an inch in diameter, smooth on the surface, apparently distended, and conveying to the finger a sense almost of fluctuation. The right one was remarkably twisted, the fimbriated extremity being turned back upon the uterus, to the posterior part of which it was adherent. The left followed nearly its usual course, but both were fixed by adhesions to the surrounding parts. On squeezing them, well-marked tuberculous matter exuded from their extremities, and on section they were seen to be completely filled by yellow cheesy tubercle. The ovaries were closely drawn to the sides of the uterus, but were themselves healthy. The uterus was somewhat increased in size, and twisted out of its natural direction by the adhesions which itself and the Fallopian tubes had contracted. On section its mucous membrane was seen to be the seat of tuberculous deposit and ulceration. That of the cervix was healthy. Isolated masses of tubercle were likewise seen in the muscular tissue of the uterus itself. The peritoneum covering the uterus was similarly affected as the other parts of that membrane. The only mark of disease in any other organ was the presence of two or three small clusters of miliary tubercle in the apex of the right lung.

Dr. BRISTOWE, 4th of November, 1851.

Mr. Pollock remarked, that, on looking over the *post-mortem* examination-books at St. George's, he had found that there had been six cases in which the mucous membrane of the uterus had been destroyed in the same way as in Dr. Bristowe's case, and in which there had been little or no evidence of discharge from the uterine parietes during life. In three of these cases scrofulous disease was found in the ovaries.

Dr. Brinton considered, that in many cases the fibrinous deposit after peritonitis assumed the characters of tuberculous matter, so as to lead to a doubt whether the matter deposited really was tuberculous matter, especially when all the more important organs, usually affected in this form of disease, escaped. Had the aid of the microscope been resorted to?

Dr. C. J. B. Williams had seen many cases of tuberculous peritonitis, unaccompanied by any affection of the mesenteric glands ; in fact, so far from their going together, he (Dr. Williams) thought they might rather be regarded as antagonistic of each other. When tuberculous peritonitis exists, the mesenteric glands escape, and when those glands are diseased, then the peritoneum is usually more free. It may be said, that what is called tuberculous peritonitis is not really tuberculous ; so says Chomel ; but the diseases merge into each other, and, in fact, although the yellow tubercle is not produced, yet the miliary tubercle is met with in such cases.

Report on the preceding case.—Dr. West said, that at the last meeting he had made an inquiry with reference to the microscopic characters of the matter in the uterus which had been shown by Dr. Bristowe, partly because we are so very much in the dark still with reference to disease of the lining membrane of the uterine cavity, partly because some doubt has been thrown on the nature of supposed tuberculous disease of the uterus, not merely by a general discrepancy of opinions concerning it, but also by some remarks by M. Robin, in the *Archives Générales* (for August, 1848, p. 406), where he speaks of having found the peculiar appearances supposed to be due to tuberculous ulceration of the os uteri, really produced by an enormous accumulation of epithelial cells. He, Dr. West, had further stated, that in undertaking to report on the case, he should avail himself of the assistance of some gentleman possessed of that familiarity with the use of the microscope to which he himself could not pretend ; Dr. Brinton had, therefore, kindly examined the matter, and, whilst he referred to that gentleman for an exact description of the appearances presented, he stated generally that they certainly were not such as one ordinarily observes in tuberculous matter.

Dr. Brinton then added that, in conjunction with Dr. West, he had examined the caseous-looking substance occupying the uterus and Fallopian tubes. He found it to consist almost entirely of epithelial cells with intercellular substance in a moderate quantity. The cells were for the most part of the cytoblast form, from a 2 to a 4 or a 5-1000th of an inch in diameter ; they were shrunken and wrinkled by the action of the alcohol in which

the preparation had been immersed. The intercellular material was gelatinous and clear, and was, doubtless, also exaggerated in quantity from the same cause. These appearances were very similar to those usually seen in the inflammatory exudation of a mucous surface. A glairy mucus occupying the os tincæ had also the same microscopic structure, but the cells were larger and more distinct; being apparently more recent. The tumors on the peritoneal surface, which had also been examined by Dr. West and himself, exhibited a structure which was very unlike the small amount of organization usually found in tubercle. They were distinctly fibrous, both to the naked eye and to the microscope. Their texture was tough and semi-cartilaginous; their fibres long, irregular, and branching. Very few cell-forms could be seen in and among them, and granular matter was also but sparingly present.

Dr. WEST AND Dr. BRINTON, 18th of November, 1851.

Dr. Brinton, in reply to a question of Dr. Baly, considered that the matter in the preparation was not tuberculous, because it consisted principally of an accumulation of epithelial scales, and had a more fully organized structure than tubercle.

Dr. Baly thought, that the presence of the epithelial scales, observed under the microscope, did not show that there was no tuberculous matter. In examining some intestines lately, he had found much fibrous matter mixed up with epithelial scales, and he thought, therefore, that in a case of scrofulous inflammation of the uterine membrane, it was possible the epithelial scales might be thrown off into the scrofulous matter. He did not see why the cytoblasts spoken of might not partake of the tuberculous character.

15.—*Cholesteatomatous and Cystic Tumor of the Ovary.*

The parts were removed from the same case as the specimen of necrosis of the head of the femur, exhibited by Mr. Solly. (See page 427.) The tumour occupied the situation of the left ovary, and had a coarsely lobulated outline, the average diameter being about three inches, or rather more. On section it resembled, in

its anatomical arrangements, the ordinary compound cystic tumor of the ovary, when of small size; the cysts, however, contained a very different material to that usually met with. There was a slight peculiarity in the cysts, viz., that they appeared less compound than usual; they were more independent of each other, so as to suggest the idea of their being a cluster of solitary cysts, rather than a group originating by multiplication from a single cyst; from the internal surface of one of them, however, a flattened cluster of compound secondary cysts projected into the cavity of the parent cyst, precisely as in the ordinary compound cystic tumor, so that no difference in respect of their origin and development could be presumed. The contents of the cysts formed the only peculiarity. There were four principal cysts; one occupied the precise position of the ovary, with thick, dense parietes, and filled with a firm, waxy-looking material, loosely contained in the cyst, from which it easily shelled out entire. The surface of this waxy-looking substance had a brilliant mother-of-pearl appearance, and was smooth and even, with the exception of a few small granular elevations. A section through this spherical mass exhibited the following appearances:—

The central part was of a dingy brown colour, and of cheesy consistence, homogeneous, and without a laminated arrangement; this colour ceased rather abruptly at two lines from the surface, the peripheral portion, for a line in thickness, having a dead white pearly appearance; this part had also a distinctly laminated arrangement of structure, the laminæ being extremely thin, but separable readily by the point of the scalpel. The laminated arrangement, though most distinct at the circumferential portion, was not confined to it, but extended through the dark-coloured part towards the centre, gradually getting less distinctly traceable as it approached this point, where it was completely lost. On a microscopical examination, the circumferential part was seen to consist of laminæ, having very much the appearance of tessellated epithelial cell-membrane, intermixed with layers of cholesterine crystals; the cells were irregular in form, generally hexagonal or polyhedral, very transparent, with a pale, delicate outline, and always without nuclei or granular contents, resembling scales therefore rather than cells;

although they generally presented themselves in membrane-like masses, individual cells readily separated and presented the characters above described. The crystals were extremely abundant at and towards the circumference, but diminished rapidly towards the centre, where they were absent. The cells, too, gradually lost their scale-like character, became more regularly spherical, and contained oil as they approached the same point; they still generally presented themselves in membrane-like masses, but individual cells separated much more readily. The surface of the separated cells frequently had a wrinkled appearance, probably from the escape of a portion of the contained oil. A second cyst of oblong form, measuring an inch and a half in its long diameter, passed directly outwards, one of its small extremities being adapted to the convex outline of the spherical cyst above described; it had thick parietes externally, and a thin membranous wall on its central aspect, and contained cholesteatomatous matter, resembling in its microscopic characters that above described, but of a whitish translucent, waxy, or spermaceti-like appearance throughout, and less regularly disposed. The dense, laminated material of mother-of-pearl lustre, above described as surrounding the spherical mass, existed here only at the small end in apposition with the spherical cyst, and along the sides to a variable extent. A third cyst of spherical form, nearly two inches in diameter, and situated laterally with respect to the two last-described cysts, was filled with a clear and slightly viscid or gelatinous fluid, such as is constantly met with in ovarian cysts; examined microscopically, this fluid was seen to contain masses of a finely granular matter mixed with spherical cells like mucous corpuscles; no crystals were seen, but only a small quantity of this fluid was examined, most of it having escaped on opening the tumor; however, the fluid contents of some of the smaller cysts, from the cluster of compound cysts, was carefully examined and presented similar appearances. The cluster of compound cysts alluded to was in apposition with this cyst, and also with a smaller one to be next described, between which it was compressed. The small cyst adverted to was of a narrow, oval form, less than an inch in its long diameter, more central in situation, and having thin membranous parietes; it was filled with a white

granular fatty substance of very soft consistence, resembling that met with in the ovarian cysts which contain hair, &c. Under the microscope this substance was seen to consist of cells filled with oil; the cells were of the same size and appearance as those described in the central part of the spherical cholesteatomatous mass from the first cyst, but completely spherical, being distended with oil, and without any tendency to cohere; cells having a slightly wrinkled appearance from the partial escape of oil were also numerous. A portion of this fatty substance was allowed to remain a few hours on a piece of writing-paper, on which it left a large greasy spot. These appearances seemed to favour a suggestion made by Dr. Bristowe, that the cells or scales intermixed in membranous layers with the crystals of cholesterine, principally on the outer portion of the cholesteatomatous masses, were identical with the oil-containing cells in the central portion, and the fatty substance in the fourth-described cyst being derived from them by the simple exudation of their oily contents, instead of being formed by the shedding of epithelium in successive layers from the walls of the cysts into their cavities as described by Müller. The crystals seemed to abound in direct proportion to the disappearance of the oil from the cells, and therefore existed in greatest abundance at and towards the surface of the cholesteatomatous masses.

Mr. ADAMS, 2nd of December.

16.—*Malignant Disease of a Cystic Ovary—of the Liver and Peritoneum.*

The specimen exhibited was taken from the body of a married female, A. T., aged fifty-eight, who was admitted into St. Thomas's Hospital, under Dr. Waller's care, with all the symptoms of ovarian dropsy. She was thrice relieved by tapping and the removal of about a pailful and a half of thick glairy fluid. The puncture made at the last operation never healed, and she died exhausted on the 19th of February, 1852.

The ovarian tumour (which replaced the right ovary) was about as large as an adult's head; it was adherent by soft adhesions to all the surrounding parts, and in front was perforated by the small opening which remained from the last tapping. Its

parietes were half a line or more in thickness, and consisted of fibrous tissue, but were softer than the parietes of such tumors usually are. It was made up of two cysts, one formed its chief bulk, the other was much smaller, situated to the right of and flattened against the former. The contents of the larger cyst was a fluid, like thin badly made paste; it was mucous-like and opaline, with numerous flakes of a soft opaque white substance floating in it. The interior of this cyst was thickly studded with outgrowths, in some parts so small that they appeared like minute granules, in others an inch or more long. The smallest were so minute that they hardly did more than give a perceptible roughness to the surface. A little larger, they formed small globular or flattened solid pedunculated bodies, or slender clavate processes, which gave rise to secondary ones, so as to become more or less compound. These latter frequently formed clusters as large as a pea or bean, and in some instances circular groups an inch or more in diameter, in which case they sprung from a solid whitish thickened basis. Less frequent than either of the above were small cysts, varying from the size of a pea downward; spherical, with a thin translucent wall, and contents either clear and mucous-like or thick, and more or less resembling pus or softened fibrine; attached by a more or less elongated peduncle; sometimes solitary, sometimes mingled with the clusters of solid growths; generally smooth on the surface, but occasionally having a few small clavate bodies growing from them. A large part of the posterior surface of the tumor was covered by growths an inch or more long. They appeared chiefly to consist of elongated pedunculated cysts filled with clear mucus, or with an opaque whitish fluid or solid substance. Their peduncles were highly vascular, and their vessels were prolonged some little way into the cysts. Their apices were very irregular and indistinct. A quantity of thick tenacious fluid and fibrinous (?) deposit adhered to this part and obscured it; it was difficult of removal, and in many cases appeared to be connected with the contents of the cysts, as though formed by exudation of the contents through the ruptured cyst-wall. The cysts were not solitary, but more or less clustered and adherent, as though they had been formed in the same way as the compound solid growths; between these

clusters were numerous smaller cysts and growths resembling those before described.

The second ovarian cyst was entirely filled by a soft adherent fibrinous substance, but presented no appearance of growth from its surface.

Microscopic characters.—The internal surface of the ovarian cyst, almost wherever it was examined, presented on a minute scale a repetition of the naked eye characters, presenting vast numbers of pedunculated, clavate clustered growths, formed apparently of a simple basement membrane enclosing cells. These were found on the walls of the cysts on the solid out-growths, and less frequently on the surface of the secondary cysts. (See Plate X.)

The walls of these secondary cysts were exceedingly thin and delicate, and almost structureless, except that they presented numerous and large blood-vessels, and also many cells and nuclei which adhered to the surface.

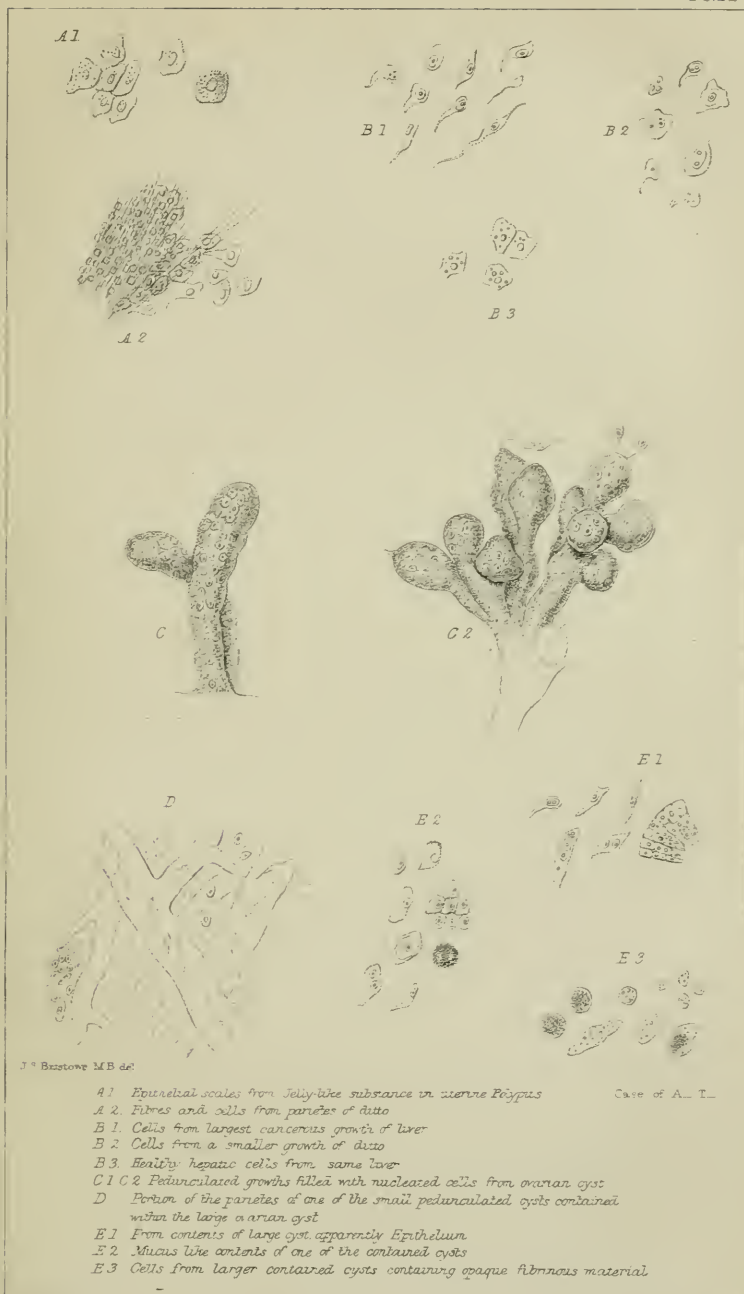
The fluid of the ovarian cyst contained numerous cells usually columnar and frequently clustered, being for the most part evidently shed epithelium.

The mucus-like contents of some of the secondary cysts presented numerous nucleated and bi-nucleated cells, some of which were loaded with granular matter. The opaque contents of the others presented also similar nucleated cells, but there were likewise a large number of compound granular cells, and smaller cells having the appearance of pus cells. (See Plate X.)

The nuclei of the cells above described, presented, in almost all cases, one or two nucleoli.

There was no other very remarkable appearance in the organs of generation. The left Fallopian tube adhered by its extremity to the corresponding ovary, and the posterior lip of the os uteri gave origin to a small polypus about as large as a bean, which appeared to consist of a number of follicles, opening externally by distinct orifices, and containing in their interior a quantity of thick jelly-like mucus.

The peritoneum was the seat of chronic inflammation. The liver contained, in its interior, a globular tumor, about an inch in diameter, and on its surface several about as large as peas;



J. B. Bostone MB de.

Case of A. T.

A1 Epithelial scales from Jelly-like substance in *sternae Polypus*

A2 Fibres and cells from parietes of ditto

B1 Cells from largest cancerous growth of liver

B2 Cells from a smaller growth of ditto

B3 Benign hepatic cells from same liver

C1 C2 Pedunculated growths filled with nucleated cells from ovarian cyst

D Portion of the parietes of one of the small pedunculated cysts contained within the large ovarian cyst

E1 From contents of large cyst apparently Epithelium

E2 Mucus like contents of one of the contained cysts

E3 Cells from larger contained cysts containing opaque fibrous material



they were soft, opaque, white, and yielded a cream-like juice on pressure. The larger one presented a considerable amount of vascularity about its circumference, and towards its centre an opaque yellow reticulum. The tumors consisted of cells, roundish, fusiform, caudate, or irregular, containing one or two nuclei, which in their turn presented from one to three minute spherules or nucleoli. (See Plate X.) They were evidently malignant. From the external surface of the stomach, likewise, projected a few small nodules, having, both to the naked eye and under the microscope, the characters of medullary cancer. The right kidney was in a condition of hydro-nephrosis, apparently caused by the pressure of the ovarian tumor on the ureter. All the other organs were healthy.

The first question that presents itself is, what was the nature of this disease of the ovary? It appears to me that it was of a twofold nature, that it was a case in which malignant disease had become developed from the lining membrane of an ordinary innocent ovarian cyst, just as it might do from any natural serous membrane in the body. The smaller of the two cysts presented all the characters of an ordinary simple, innocent ovarian cyst, and judging from the amazing numbers of the included growths, from their small size as compared with that of the cyst containing them, and from the fact of their arising solely in its *lining* membrane, we are irresistibly led to the belief that their existence could not have been coeval with that of the cyst itself; but that this at one period of its existence must have been a simple serous cyst like that adjoining it. Taking it for granted, then, that the secondary growths made their appearance some time after the development of the parent cyst, it seems very probable, from combining this inference with the facts just mentioned, that they were adventitious growths, and that they were cancerous in their nature seems borne out by the following considerations:—

1st. They consisted almost entirely of nucleated cells. 2nd. They were associated with well marked cancer in the liver and on the stomach. And 3rd. The growths bore a considerable resemblance to those which are characteristic of cancerous disease attacking the true serous membrane, a view which may be con-

firmed by a reference to the following short abstracts of two such cases.

J. F., aged fifty-six. Malignant disease of right toe, with malignant degeneration of the peritoneum and right pleura. (During the last session a portion of the omentum of this patient was exhibited to the Society by Dr. Risdon Bennett.) The right pleura was studded with soft white tubercles, varying in size from that of a mere speck to that of a small pea. The smaller with many of the larger ones were irregularly hemispherical in shape, being attached by broad bases, whilst the remainder hung from the surface by peduncles of greater or less tenuity. These bodies were irregularly scattered, being single in some parts, clustered in others, and in others again completely confluent, so as to form large flat masses. The peritoneum was similarly affected, only to a much greater extent. In all cases the growths consisted of nucleated cells.

W. S., aged twenty-eight. Encephaloid cancer of the peritoneum. In this case (which was under Dr. Peacock's care) there was no cancerous disease of any other organ in the body, nor in fact disease of any kind. The peritoneal cavity was filled with soft encephaloid tumors, varying from the size of a cocoa-nut downwards. The smallest were thinly scattered over the surface, and formed small lenticular elevations. The bases of attachment of the larger ones were usually somewhat less in diameter than the tumors themselves. They were made up chiefly of cells with round or oval nuclei; the latter containing sometimes none, at others one or two nucleoli.

The only real point of difference, so far as I can see, is the presence of cysts mingled with the solid growths in the case under consideration, this may be partly accounted for by the tendency towards the formation of cysts, which is characteristic of ovarian disease, but I will endeavour to give a more satisfactory explanation. It appears that all the growths in the first instance were solid, and that it was only after a certain size had been attained that cysts began to make their appearance. This, coupled with the fact that many of the larger cysts were clustered in a peculiarly complex way, resembling very much the arrangement that obtained in the smaller pedunculated growths, seems to indicate

that the cysts were developed from the pedunculated growths. Again, the pedunculated bodies consisted of a basement membrane enclosing nucleated cells. The well formed cysts were likewise bounded by a thin membrane, and they contained a clear fluid, in which were floating cells, probably shed epithelium, but there were many bodies in an intermediate condition ; some were filled with an opaque pulpy substance, which was more or less fluid, and even varied in this respect in the same growth, and in some, while one half of the contents was clear and mucous-like, the other was semi-solid and opaque ; now all the opaque parts contained numerous granule cells. It seems probable, from these characters, that after the solid growths had attained a certain size, their cells underwent a process of fatty degeneration, which stage is represented in those bodies with the opaque contents ; that the cells then became absorbed, and ultimately a perfect cyst containing clear contents, made its appearance. Many of these changes were masked by the evidently inflammatory changes which had taken place in several parts, and therefore the explanation above offered is not so free from objection as could have been wished. In no case could I distinguish any tertiary growths springing from the inner surface of the secondary cysts.

Dr. BRISTOWE, *6th of April*, 1852.

17.—*Cancer of the Ovaries—Stomach, Liver, and Peritoneum.*

A. L., aged twenty-six, married, was admitted into St. Thomas's Hospital, under Dr. Waller's care, in almost a dying state, suffering chiefly from great accumulation of fluid in the abdominal cavity. She was tapped, and two pailsful of clear serum were drawn off. She rallied for a time, but died on the 20th of March 1852.

The uterus and Fallopian tubes were healthy, but the ovaries diseased. The left was enlarged to about the size of a hen's egg, the right to that of a large orange. They were very irregular, and lobulated externally, the projections being more or less hemispherical, and varying in size from that of a walnut downwards. The left was free of the uterus, being only attached by the ligament of the ovary ; the right and larger one had sunk

somewhat in the pelvis, extended behind the uterus, and had become to some extent adherent.

The right ovarian tumor presented different degrees of consistence ; the softest parts were the projecting lobules, and these gave a very decided sense of fluctuation ; the firmest parts were those corresponding to the depressions between the lobes. The section presented a rather peculiar appearance. There was very distinct evidence of division of the tumor into lobules, this being less apparent in some parts than in others. The lobules most marked were clearly surrounded and defined by fibrous tissue, but they did not present all the same characters ; some of the larger ones had a pinkish grey tinge, with a slight degree of translucency, and were indistinctly divided into minute loculi by delicate fibrous processes prolonged in from the capsule. Other lobules were smaller, less distinct, and enveloped in a greater amount of fibrous tissue, so that that portion of the section which they occupied assumed somewhat of a bluish white hue ; both of these parts had about the same degree of consistence, and were moderately firm and elastic. One portion of the growth, which appeared to correspond with a lobule of large size, or with several merged into one, had a very remarkable aspect. At one part it presented a quantity of a somewhat soft and pulpy olive green substance ; at another an opaque yellow deposit ; here a soft white medullary substance, more or less marked by vessels, or infiltrated with extravasated blood,—there a jelly-like substance, consisting of wide meshes of a soft fibrous material, filled with transparent fluid,—and in the centre was a large irregular cavity formed by the breaking down of the tissue. On cutting into some of the soft tubercles which stood out from the surface, they were found to consist of an imperfect reticulum of opaque yellowish material, the intervals of which were occupied by a yellowish succulent transparent substance, having a gelatinous appearance. In all the parts above mentioned the jelly-like appearance was due to an infiltration of clear serous fluid in a net-work of fibrous tissue. The left ovarian tumor presented characters sufficiently like those above described to make it evident that it was identical in its nature.

Microscopic characters.—The more solid parts of the tumor

were composed of fibrous tissue and cells. The fibrous tissue was in considerable quantity, and circumscribed, numerous, more or less round or oval spaces within which the cells appeared to be contained. The cells were of moderate size, round, oval, or fusiform, always containing apparently one oval nucleus. (See Plate IX. No. 3.)

The substance forming the partially broken down division of the tumor presented different microscopic characters, according to its different naked-eye appearances. The soft encephaloid portion was made up of cells, mixed with a small quantity of fibrous tissue, the cells were larger than those before mentioned, and frequently contained two nuclei; the nuclei being nucleolated. There were also free nuclei, and some compound granular cells. The olive-green substance appeared to be essentially the same in its composition, but mixed up with it were innumerable blood-corpuscles, which had yielded up their colouring matter, and had become crenated at their edges. The cells, moreover, which were abundant, were more granular than those just described, and yellow in colour, as though some of the colouring matter yielded by the blood had been absorbed by them. The green colour of this part was evidently due to the infiltrated blood. The opaque yellowish substance presented a large number of small cells, all more or less granular. The jelly-like portion was composed of well-defined delicate transparent fibres bounding large oval spaces, and presented much the same appearance as the air-cell of the human lung. The fibres were, however, dotted and obscured by numerous minute oil-globules and compound granular cells. (See Plate IX. No. 3.)

The substance of the superficial nodules presented in its jelly-like part a delicate irregularly arranged fibrous net-work, obscured by molecules of oil and compound granular cells. In the opaque part the cells and granules were very abundant, the opacity evidently being dependent upon their presence.

There was a great amount of disease in many other abdominal organs. The peritoneal cavity contained about four quarts of serum. Its surface in the neighbourhood of the diaphragm, was studded with numerous nodules of malignant matter. The stomach presented all the characters of far-advanced scirrhus

disease ; it was much contracted in size ; its walls greatly thickened ; both the muscular and mucous coats being in places upwards of a quarter of an inch in thickness ; and in one part destroyed to a great extent by ulceration. The serous coat was studded with numerous firm white tubercles, and by means of the development of the disease in this situation the stomach had become connected with all the surrounding organs. To the left it adhered to the spleen, the malignant disease being prolonged apparently from the stomach into the hilum of this viscus, and thence extending for a short distance into its structure. Behind, it was connected so firmly to the left extremity of the pancreas, that these organs were inseparable ; in fact that portion of the pancreas had lost all traces of its original structure, and formed a homogeneous scirrhus mass. Enveloping the pancreas and stomach, and connected more or less with them, were numerous lymphatic glands, varying from the size of a pigeon's egg downwards ; they were apparently all diseased, and varied from firm scirrhus to the softest form of medullary growth. The liver likewise presented several nearly spherical masses of soft medullary cancer ; one in the centre of the left lobe was about two inches and a half in diameter ; this tumour below was continuous with the disease in the stomach, and in a large mass of glands behind it. The latter, however, presented the ordinary characters of scirrhus, and the fibrous material characteristic of it could be seen extending for some little distance into the medullary liver tumor, forming as it were a kind of imperfect septum between them. One tumor in the liver was developed just at the point where the hepatic veins empty themselves into the cava, and had evidently produced some considerable obstruction, which accounted in some measure for the ascites. All these tumors had the usual characters of cancer, both to the naked eye and under the microscope. No other organ in the body presented any abnormal appearance.

In this case, as in the last, I believe the disease in the ovaries to have been malignant, but there was a remarkable difference in their characters ; this being no doubt chiefly due to the different nature of the structures implicated. In the former case it attacked an adventitious serous membrane, and scarcely deserved the name of cancer of the ovary ; in this it has taken its origin in the paren-

chyma of the organ itself. That the disease was cancerous, I think there can be no doubt. In the first place, both ovaries were attacked in the same manner, in both the disease existed under the form of a rapidly growing tumor, and in both it had completely replaced the proper ovarian structure. Secondly, associated with it was a very large amount of undoubted cancer of the stomach, liver, &c. And thirdly, though perhaps its structure did not throughout exhibit the best marked form of cancer, still the more solid part was sufficiently like a soft form of scirrhus, and in one place, as before mentioned, it had assumed the well-known characters of encephaloid and hæmatoid cancer.

The idea I have formed of the growth of this tumor will be gathered from what follows.

The more central and solid part appeared to express the original condition of the tumor, to be that part in fact which was first formed; this consisted of fibrous tissue enclosing oval spaces which contained nucleated cells. The projecting nodules were evidently increasing in size, and by their enlargement adding to the bulk of the original growth; but though growing, their microscopic characters showed that they consisted chiefly of tissues in a state of decay; the opaque reticulum consisting almost entirely of granule cells; the intermediate transparent portions of a delicate network of fibres thickly studded with granules, and containing likewise a few granular cells in their interstices. With respect to the relationship between the opaque and transparent portions of these nodules, my impression is, that the latter is an advanced stage of the former, and (referring to the central part of the tumor as our guide, and considering these changes to have occurred in a tissue presenting similar anatomical characters) that the primary change was a deposit of oil in the cells, rendering the tissue opaque. That the cells then underwent absorption, and that during that process the degeneration had extended itself to the fibrous tissue, and that, as these structures had successively undergone removal, the vacant spaces have become occupied by serous fluid. It seems not impossible that had these changes been allowed to continue, a cyst might have been the result. A similar change, the history of which, however, was more apparent, had occurred in a portion of the softened

segment of the tumor ; this too had a jelly-like appearance, and microscopically it displayed an absence of cells, or at most only a few granule cells and fibrous tissue of extreme delicacy studded with oil-granules ; but in this case its origin in the original structure of the growth was manifest. There were still present the oval spaces, vastly increased in size, however, and devoid of cell-contents, and still the fibrous tissues definitely arranged round them, but greatly diminished in quantity and opacity, and evidently in process of removal. The brain-like portion of the tumor does not seem to call for special remark ; for as not unfrequently happens, the cell-structure appears here to have taken on an activity of growth out of all proportion to the fibrous matrix, so that the original scirrhus has been replaced by medullary cancer.

Dr. BRISTOWE, 6th of April, 1852.

18.—*A Fibrous Tumor in the Uterus, and Diseased Kidneys.*

M. C., aged forty-six, anæmic, subject to menorrhagia and leucorrhœa during eight years, attended with severe pains in the hips, back, and pubes, had suffered from cough, dyspnœa, palpitation and pain in the region of the heart, for the last two years, with feeble, irregular and intermitting pulse, and the physical signs of dilatation of that organ, but none of valvular disease. A digital examination found the os and cervix uteri healthy. Her symptoms were so severe as to keep her almost constantly confined to her bed, but they were relieved by a combination of iron and digitalis. At Christmas last she began to suffer from gastric pain, with vomiting and diarrhœa, in addition to her other symptoms. Three weeks before death she had œdema of the face and ankles, followed by symptoms of pneumonia of both lungs, with dysentery and jaundice for the last ten days, during which time the anasarca increased rapidly, and was accompanied by ascites.

Post-mortem examination.—Mucous membrane of trachea and bronchi deep red, masses of red, softened lobular hepatization at the back of each lung. All the cavities of the heart distended with black coagula, and dilated, particularly the left auricle, which was half as large again as the right. Mitral valves united together so as only just to admit the point of the finger, with

vegetations on the auricular surface. The stomach and duodenum congested and covered with thick mucus; jejunum and ilium healthy, but the sigmoid flexure of the colon and the rectum were contracted, thickened and lined with viscid mucus, but not ulcerated. Cirrhosis of the liver; spleen small and wrinkled; pancreas healthy, but double the usual size; kidneys granulated and pale, except in certain healthy portions, which were congested. They contained several serous cysts, and were fissured on their outer surface, the surfaces of the fissures having a granulated appearance, from the presence of numerous minute bodies resembling those of Malpighi. The uterus contained a fibrous tumor an inch and a half in diameter, imbedded in its anterior wall, but it was healthy, except a little congestion at the os and neighbouring vaginal membrane. Ovaries contracted, wrinkled, and a small fibrous tumor the size of a pea attached to the extremity of the left. Under the microscope the cells of the liver and kidneys contained an unusual quantity of oil-globules, and on separating the tubuli of the latter by needles, they had lost almost all their lining cells. Besides circular nucleated cells the fibrous tumors contained many irregular-shaped and fusiform ones. Dr. OGIER WARD, 6th of April, 1852.

DISEASES OF THE OSSEOUS SYSTEM.

1. *Great enlargement of the Head occasioned by a Morbid Growth from the Cranial Bones.*

This occurred in a farmer's boy, aged fifteen, who had been repeatedly struck upon his head with the handle of a pitchfork. On one occasion the blow was so severe that it stunned him, and about a month afterwards he perceived a lump upon the top of his head, which gradually extended, through the following two years over the whole of the superior, lateral, and posterior parts of the cranium. The form of the swelling was such, that being covered by the scalp stretched over it, the aspect was that of an additional cranium growing from the vault of the skull. The increase of the morbid growth was accompanied by severe pain in the head, also by great enlargement of the blood-vessels of the

scalp, and by loss of sight, first of one eye, then of the other. At length sloughing and suppuration ensued in the scalp, as the consequence of its stretched and inflammatory condition, and after severe suffering for nearly three years, convulsions ensued, under which he sank. On examining the head, a morbid growth was found arising from the outer table of the cranium through the greater part of its extent, and a similar growth was found arising from the inner table, and thence extending into the cranial cavity, causing, by its pressure, absorption of part of the cerebral hemispheres. The cranial bones intervening between the morbid growths were found thickened and otherwise altered in texture. The morbid growth from the outer table of the skull was firm, and of a whitish colour; it had not the characters either of hard or soft cancer, nor was it fibrous. The morbid growth from the inner table was somewhat softer, and of a darker colour.

Mr. STANLEY, 16th of December, 1851.

Report on the preceding case.—The specimens of morbid structure examined consisted of:—

1. A portion from near the circumference of the exo-cranial growth; at this part the growth was firm, tough, and slightly elastic—its cut surface had a pale yellowish tint, was somewhat transparent and dotted and streaked here and there, with very delicate bright red lines and points. It had an imperfectly marked fibrous aspect (the fibres seeming to radiate from the cranial to the cuticular surface). It yielded on pressure only a little clear, colourless fluid.

2. A very small piece of the bone, to which the last-mentioned part of the growth was attached—the bone was at this spot soft enough to be cut with a knife.

3. A portion from near the centre of the exo-cranial growth; this portion was comparatively soft; its cut surface exhibited no trace of fibres; it had a faintly granular appearance; and was opaque and of a dirty reddish white colour—when scraped an opaque semifluid substance was removed by the knife.

4. A portion from the endo-cranial growth; this part was firm, very tough, and pale greyish white in tint—the juice expressed from it was transparent.

5. A little of the soft reddish brain-like substances adjacent to the tough endo-cranial mass.

Microscopical characters:

No. 1.—*a.* Nucleated fusiform fibres.

b. Free nuclei, circular, oval, oat-shaped and rod-shaped.

c. Bundles of white fibres, which swelled up and became transparent on the addition of acetic acid. After the action of the acid, yellow elastic tissue and elongated nuclei interspersed among the bundles of fibres were readily distinguished.

d. Vessels, coated externally with elongated fusiform fibres.

No. 2.—The piece of bone was extremely thin, and had dried up before I could examine it. On the addition of H. Cl. it yielded a large number of bubbles of gas; being rendered transparent by the action of the acid, numerous highly refracting yellowish granules (fat?) were brought into view; ether was not used.

No. 3.—*a.* Molecules of fat and protein substances.

b. Non-nucleated corpuscles from the $\frac{1}{3000}$ th to $\frac{1}{2000}$ th of an inch in diameter; each containing a few granules—the largest closely resembled the pyoid corpuscles of Lebert.

c. Free nuclei, oval oat-shaped and rod-shaped; several of these were measured; their length varied from $\frac{1}{2700}$ th to $\frac{1}{1350}$ th of an inch, their breadth from the $\frac{1}{5000}$ th to $\frac{1}{4000}$ th of an inch.

d. Blood discs, variously distorted.

e. Corpuscles containing a single nucleus (fibro-plastic corpuscles of Lebert).

f. Corpuscles about the $\frac{1}{1330}$ th of an inch in diameter filled with granules, but having a nucleus perceptible—these granular corpuscles were apparently the last described (*e*) filled with granules.

No. 4.—White fibrous tissue. By the action of acetic acid this was made transparent, and then elongated

nuclei studding the fibres and yellow elastic tissue were brought into view.

No. 5.—*a*. Numerous free nucleated cells, containing a few granules; the diameter of these cells was about $\frac{1}{1380}$ th of an inch, of the nucleus about $\frac{1}{2500}$ th (the fibro-plastic corpuscles of Lebert).

b. A large number of free nuclei; each containing a few granules, these nuclei varied in diameter from the $\frac{1}{3500}$ th to the $\frac{1}{2000}$ th of an inch.

c. Some irregularly shaped nucleated cells resembling in appearance ordinary nerve-cells.

d. A few cells resembling the last, but containing two nuclei.

e. Large spherical and oval cells, one circular in outline measured $\frac{1}{300}$ th of an inch in diameter; others oval in form $\frac{1}{700}$ th of an inch by $\frac{1}{500}$ th. The walls of these cells had a measurable thickness; in one case the wall being $\frac{1}{4000}$ th of an inch in breadth; they were composed of nucleated fibres; apparently delicate fusiform fibres, arranged concentrically.

These cells contained from two to a dozen (more or less) free nuclei and nucleated cells.

f. A few cells similar to the last described (*e*), but without fibrous walls (the parent cells of Lebert).

g. Fusiform fibres, each containing an oval, or an oat-shaped nucleus: the long diameter of the nucleus being the $\frac{1}{2000}$ th of an inch and under.

At places these fusiform fibres were arranged side by side constituting fasciculi of some breadth.

h. Cells from the $\frac{1}{1500}$ th to $\frac{1}{1000}$ th of an inch in diameter; oval or spherical in shape, and filled with granules; in some of these cells the granules were evidently fat, in others they appeared to be fat and protein. In some of the cells a nucleus was dimly seen; in others no trace of a nucleus was perceptible.

i. Blood-vessels, capillaries, and minute arteries and

veins; the walls of the latter were coated with fusiform fibres; the former were composed of a simple membrane studded with nuclei.

The microscopical characters here detailed may be grouped under four heads:—

1st. The normal elements of the parts more or less changed, *e.g.*, the nerve-cells.

2nd. Fibro-plastic corpuscles, fusiform fibres, and free nuclei.

3rd. White fibrous and yellow elastic tissues. These, perhaps, owed their origin chiefly to the development of the fibro-plastic corpuscles; probably, however, they were partly the remains of the elements of the normal tissues of the parts.

4th. The products of inflammation, *e.g.* the non-nucleated granular corpuscles, and molecular protein granules.

In different stages of development, in different states of decay or degeneration, and variously combined and arranged, these constituted the portions of the growth which he (Dr. Jenner) had for examination. A question may be entertained, whether in this case the fibro-plastic element, and, consequently, so much of the fibrous tissue as had its origin in it, may not have been developed from a blastema, the product of inflammatory action; certainly, fibro-plastic corpuscles and fusiform fibres are sometimes found on serous membranes, as the result of the development or organisation of inflammatory exudation matter, and it would appear to depend, partly at least, on the constitutional state of the patient to determine whether inflammation shall cause the exudation of simple fibrillating contractile lymph, a blastema capable of evolution into fibro-plastic tissue, pus, or granular corpuscles, and protein molecular granules. But, whether themselves originating in inflammatory action or not, it is universally admitted that fibro-plastic growths are, like all vascular structures, capable of becoming inflamed, and to the inflammation set up in the growth itself the softening and the granular corpuscles seem in this case to have been due. In the parts in which these corpuscles and granules were the most abundant, fat was found in the largest quantity. This fact lends support to the opinion, that this form of exudation undergoes fatty degeneration with greater facility than most other forms. With reference to the question

of malignancy, the only conclusion warranted by the microscopical examination is, that it was locally, but not constitutionally, malignant; at the same time, it seemed to him that our acquaintance with the microscopical characters of morbid growths, the histories of which prove them unequivocally to have been constitutionally malignant, is not sufficiently extensive for a definite statement to be made on this point.

Dr. W. JENNER, *6th of January, 1852.*

2.—*Three Cases of Fracture of the Spine, unattended with Paralysis.*

1. Mr. Shaw brought for the inspection of the Society a boy, aged eight, who, three months and a half ago, had fracture of the spine at its lower part, without paralysis. The spinal column was straight to the second lowest dorsal vertebra; at that point there was an abrupt and projecting curve, with the convexity to the left side, formed by the two lowest dorsal and three highest lumbar vertebræ; the whole of the displaced bones gave rise to a distinct, irregular, hard swelling in the left lumbar region; the most prominent points were the articulation between the left oblique processes of the first and second lumbar vertebræ, which, sticking out between the fibres of the longissimus dorsi and sacrolumbalis, pressed against the skin, and the spinous process of the second lumbar vertebra. The projecting bones had no motion on each other, having become ankylosed since the injury. The patient, who had been sent from the country, was not seen by Mr. Shaw till nine weeks after the accident. The mother, an intelligent woman, stated that, while getting up behind a waggon in motion, her boy became entangled between the body and the wheel; when extricated, his face was swollen, as if he had been strangled, blood flowed from his nose and ears, his eyes were blood-shot, and the lids presently became black and swollen, so that he could not open them; but there were no wounds about the head or chest; and an hour and a half afterwards, when she first saw him, he was sensible and recognized her by her voice. The surgeon, who did not visit him till he was in bed, had his attention directed to the head and chest, but did not examine the

back. Warm baths having been ordered for him for several nights, the mother observed that the movement of placing him in the bath, especially if she lifted him by the loins, made him cry out with pain ; and it was the same when she assisted him in passing his evacuations. Although she had previously spoken about the pain, the surgeon did not examine the spine till five weeks after the injury, when the projection that now exists was noticed ; she is positive, that before the accident he was straight and quite strong in the back. He was kept in bed for a fortnight longer ; and, before he could stand, was taken to London, where he remained a week. Some days after his return, he began to walk a little, and when brought to the hospital on the ninth week, he walked pretty strongly. After procuring proper spinal supports, he was allowed to run about, and he has remained free from pain in the back or elsewhere till the present time. The mother is quite clear in stating that he never lost either power of motion or sensibility in his legs, that he required no assistance for passing his water, and his stools were regular.

2. Mr. Shaw next exhibited a cast of the back, taken from a patient, aged forty-eight, admitted under his care June 28th, last year, for fracture of the right femur. After recovering from that injury, it having been remarked that he had deformity and stiffness of the back, inquiries were made ; and it was found that two years before, while working in a railway cutting, a mass of earth fell, and buried him under it, and a quarter of an hour elapsed before he was dug out. He was then found lying doubled up, with his head near his feet : and since that time he has never been able to hold his body straight. The parish surgeon visited him once, but did nothing for him ; and he lay in bed for eleven weeks without medical attendance. He never lost sensation or power over his legs, and only felt weak in the back. At the end of that time, he walked with difficulty three miles to a railway station, and thence travelled thirty miles to his home. By degrees he regained strength in his back, and although unable to lift heavy weights, he could work as a field-labourer, till he met with his last accident. The cast showed a general incurvation of the spine, from the ninth dorsal to the third lumbar vertebra ; besides considerable projection of the spinous processes of the first and

second lumbar vertebræ, the articulations between the oblique processes were visible on both sides, but more distinctly on the left; the spine was immovable at the projecting part, the result of ankylosis.

3. For the third case, Mr. Shaw exhibited a drawing. The patient was a sawyer, aged thirty-one: and was admitted into Middlesex Hospital, 24th of May, 1845. While in a stooping posture, a log of wood, said to be between eight and ten tons in weight, rolled upon the back of his head and shoulders, and bent him down. From the sixth dorsal to the third lumbar vertebra, there was an abrupt, irregular projection of the spine. Below the seventh dorsal vertebra, there was a depression two inches in extent, caused by rupture of the interspinous ligament, and fracture of a spinous process; the greatest prominence of the swelling was formed by the spinous processes of the first and second lumbar vertebræ, and by the oblique processes on each side, which projected through the torn muscular fibres; below the third lumbar vertebra there was another pit caused by laceration of the interspinous ligament. The patient retained power over his legs, as an instance of which, he walked, with the support of his fellow-labourers, some distance before he was put in bed; although his feet and legs were, as he said, "numb," yet he could feel slight pinching, and the contact of the clothes. He afterwards complained much of aching and pricking pains, like that of needles, in both legs below the knees, but that ceased in about six days. Although strictly cautioned against moving in bed, he frequently rolled himself, and that with much force, from one side to the other. He was unable to make water, but was sensible of the passing of the catheter; he had also some difficulty in controlling the action of the sphincter ani; but, in less than a fortnight he recovered that power; and the command over the bladder was restored at the same time. His eyes were blood-shot, and the lids black from ecchymosis, and, for a few days, the sputa in coughing were tinged with blood. On the tenth week he sat up for some hours in the day, supported by spinal stays. On the fourteenth week, being able to walk about the ward, he requested to be discharged. Five months afterwards he was met in the streets walking, with the aid of two sticks, at a good pace, and he could

accomplish three miles at a time. Two years after that (July, 1847) he was heard of as working at light jobs in the fields.

Mr. Shaw, finally, referred briefly to another case similar to the above, which had come under his notice in August, 1828, and was related by him in the 17th Volume of the "Medical Gazette." He remarked, that these were examples of the extensive injury which the spine might sustain without paraplegia, if the fracture took place below the point where the cauda equina begins. At the tenth dorsal vertebra the part so called commences; and from that to the termination of the spinal cord at the second lumbar vertebra, the roots of the nerves enclose and protect that important organ so effectually, that severe injury to the surrounding bones may not reach the cord. When fracture occurs lower down, where the cauda equina alone occupies the vertebral canal, of course the dangers of paralysis taking place are diminished; for the long, loose, nervous fibrils composing that part can accommodate themselves to the changed direction of the canal, without loss of function.

Mr. SHAW, 18th of November, 1851.

3.—*Specimens of Necrosis of the Lower Jaw, and a Specimen of Exfoliation of the Alveolar Process.*

The following is the history of the first of these cases, furnished by Mr. Matthews, of the Marylebone Dispensary.

F. L., aged seven, was admitted a patient under Mr. Beevor, in July 1851, with scrofulous disease of the body of the inferior maxilla, involving the whole depth of the bone from the canine to the last molar tooth on the right side; the whole of this portion of the bone was evidently dead, and beginning to loosen, the gum partially absorbed between the teeth, showing the dead bone in two places; there was a very copious and offensive discharge from the mouth, and also from a sinus which opened externally below the margin of the jaw; between the facial artery and angle of the bone there was, when he was first admitted, a considerable deposit of new bony matter beneath the dead bone connecting the healthy portions, and forming a kind of natural splint, giving considerable use of the jaw in mastication, and much increasing the length of the face on that side; this gra-

dually pushed the dead bone upwards into the mouth, from which it was ultimately removed. The patient's general aspect was pale and unhealthy; pulse quick and weak; tongue foul; bowels irregular, and appetite bad. After a few doses of mercury with chalk at night, followed by castor oil in the morning, he was put on a course of steel wine. Under this treatment his health improved so much that Mr. Beevor determined not to remove the dead bone by operation, but merely to assist the process of exfoliation that was evidently going on; and in the beginning of October the dead bone was removed from the mouth with a pair of tooth forceps, without any difficulty or loss of blood.

Another portion of the ramus of the same side has become diseased, and is going through the same process, and a sinus has formed about half way between the angle and condyle of the bone a little below the level of the ear of that side.

The disease first began in September 1850, rather suddenly, as toothache; an abscess formed and broke externally, leaving the sinus under the margin of the jaw, which remained till the dead bone was removed; this has since healed up.

The teeth contained in the bone that was removed were the permanent set, with the exception of these which had become loose and were taken away before the bone.

The exfoliated bone included nearly the whole of the right half of the inferior maxilla, extending from the symphysis backwards to the ascending ramus, and contained in their acetabula the two permanent bicuspid and permanent canine teeth. The boy was also exhibited, showing the right side of the face much enlarged; a sinuous ulcer existed about the centre of the right half of the lower jaw, admitting a probe which passed backwards towards the angle, and in an oblique direction, appearing in the mouth. There was no appearance of teeth.

Case II.—E. B., aged between four and five, was ill a considerable time with mesenteric fever, for which Dr. Henry Davies attended her for several weeks. After she became convalescent, she complained of toothache, and on her medical attendant attempting to remove a tooth, a large portion of the alveolar process, with several deciduous teeth, came away. The child

recovered perfectly, the gap was filled up, and at the age of twenty, her mouth is as modelled by Mr. Alfred Canton, and presented to the society.

Upon reference to the exfoliated alveolar processes, and the model now taken by Mr. Canton, it is found that on the left side a portion of the process was removed, containing two temporary molar and the second permanent bicuspid teeth ; and that the first permanent bicuspid is present, the second being deficient, a slight depression indicating its natural position. On the right side the exfoliated portion of the alveolar process contained the commencement of the first permanent bicuspid, the model of the jaw indicates a corresponding deficiency. It may be right to notice that the teeth have not been interfered with since the exfoliation, and, therefore, that the deficient bicuspids have never appeared.

Mr. Pilcher alluded to two other cases which had fallen under his observation, in which portions of the jaw had exfoliated at a very early period, and the permanent teeth had, nevertheless, been produced.

Mr. Pilcher remarked upon the interesting character of these cases, as demonstrating that the formation of the teeth and alveoli is independent of the jaw ; that the teeth are not portions of the osseous system. In the cases in which the rudiments of the permanent teeth are removed with the alveolar processes, such teeth are lost for ever : but the jaw-bone itself may exfoliate or be removed, leaving the nidus of the permanent teeth intact, in which case the teeth in due time appear, fibro-cartilage of varying density supplying the place of the true bone ; thus pointing to the fact of the teeth being of dermoid, and not of osseous origin.

Mr. PILCHER, 17th of February, 1852.

4.—*Disease of the Lower Jaw.*

A woman of an apparently very delicate constitution, married, and the mother of three children, came under the care of Mr. Adams, in the London Hospital, with a tumor connected with the lower jaw. It was situated to the right side of the median line, was the size of half a small egg, and protruded the integu-

ment over its centre three quarters of an inch beyond the natural level. The sublingual glands on the right side were pushed a quarter of an inch backwards by the projection of the tumor inwards into the floor of the mouth from the lower part of the oral surface of the jaw. The tumor appeared to be developed in the centre of the bone. The canine teeth of the right side had been removed seven or eight months ago. The bicusps were somewhat displaced, and sprang apparently from the top of the diseased mass. There were one or two large cutaneous veins over the outer surface of the tumor in a state of great distension. The right side of the jaw from the side of the symphysis to the anterior edge of the ascending ramus was involved in the disease. The patient could not trace the growth of the tumor to any injury. It had increased, of late, very rapidly, but its development had been unaccompanied by pain. The patient having been placed under the influence of chloroform, the part of the jaw involved in the morbid growth was removed in the usual manner. On cutting into the mass by a vertical and longitudinal incision carried by the side of the gums, the interior presented a peculiar appearance, having a mottled aspect, being partly cream-coloured, and partly of a deep claret tint: the latter appearance predominating, and being more decided in the centre than the circumference; the colour, after a little exposure to the air, changed to an arterial tint. The tumor was enveloped in an irregular capsule represented by an attenuated layer of bone which had been thinned out by the development of the tumor from within; the bony character of this investment was more obvious over that part of the tumor projecting into the floor of the mouth than was the external portion, which appeared nothing more than a dense fibrous capsule with a few spicula of bone interspersed. The tumor presented under the microscope a well-marked fibrous character, and Mr. Birkett, who examined it more carefully than myself, made out that it consisted chiefly of fibrous-tissue with development of osseous tissue, but scarcely true bone. The class to which it belongs appears to be composed of off-sets from the normal structures, having many of their characters, but never attaining to the same perfection.

Mr. N. WARD, *4th of May*, 1852.

5.—*Necrosis of a Portion of the Head and Neck of the Thigh-Bone.*

The sequestrum was about an inch in length, and half an inch in breadth. It was quite detached from the sound bone. The cavity in which it was contained occupied the neck and head of the femur, and the centre of the articulating surface of the head of the bone was quite absorbed. The joint was obliterated by the absorption of all the cartilaginous surfaces and synovial membrane. The head and neck of the femur were fully united to the pelvis by a firm fibrous tissue, forming a complete but not osseous ankylosis. On the anterior surface of the neck of the bone, just in front of the anterior intertrochanteric line, there was an opening through the sound cancellous structure about the size of a horse-bean. This allowed the exit of the pus into a fistulous abscess, which ran behind the tendon of the rectus to the outer side of the thigh.

The subject of this disease was a young woman, aged thirty-two, who was under Mr. Solly's care in St. Thomas's Hospital. She traced the disease to an injury received when she was twelve years old. Nine years ago she was under Mr. Solly's care, and the disease of the joint was so far arrested that she was able to walk well and without pain with a high shoe; but she abandoned the use of it, not liking its appearance, and got fresh inflammation in the joint, but remained suffering for some years without any medical treatment. She died with ulceration of the intestines, with a large fatty liver, and disease of the ovary. Mr. Solly considered that the necrosis was consequent on the supply of blood being partly cut off by disease of the ligamentum teres, and the obstruction of the other arteries of the head of the bone by general inflammation of its cancellous tissue. Mr. Solly remarked, that if the health and general power of the patient when she went into the hospital had warranted any operation involving loss of blood, and the exact condition of the necrosed portion could have been ascertained during life, it might have been removed by a little enlargement of the osseous aperture.

Mr. SOLLY, 2nd of December, 1851.

Mr. Solly, in reply to a question of Mr. Stanley, believed that the disease originated in the synovial membrane of the hip-joint, and that ultimately necrosis of the femur occurred. Such was his opinion, but, unfortunately, he had not been able to obtain such information respecting the case, as to satisfy his mind that his opinion was quite correct.

6.—*Specimens of Extra-Capsular Fracture of the Neck of the Femur, complicated with Fracture of the Trochanter.*

The first specimen was from a woman aged seventy, who had been admitted under the care of Mr. Adams, three or four weeks before her death. Shortly before her admission she had been knocked down upon her hip. The usual symptoms of fracture of the neck of the femur were absent. There was no eversion, no crepitus on extension; and a barely perceptible shortening was the only symptom present. The limb was merely kept straight, and the patient, two or three days after the accident, could move the thigh slightly.

The neck of the bone which had been separated from the shaft in front, at the anterior intertrochanteric line, was found driven into the cancellated structure to the extent of about one-third of an inch. The external trochanter, from the forcible impaction apparently of the neck of the bone, was fractured obliquely. The fracture commenced at the upper, outer, and back part, and descended obliquely inwards, to terminate at the lowermost part of the posterior intertrochanteric line. At the commencement of the fracture, the two portions of the trochanter were nearly half an inch apart. The base of the smaller trochanter presented a fracture in front, but not behind. The base of the impacted neck, and the interval between the two divisions of the fractured trochanter were covered by a soft ligamentous structure.

The second specimen was from a woman aged eighty-four, who, fourteen weeks prior to death, had been knocked down off a high kerb-stone, and had fallen forcibly on the left hip. The symptoms on admission were shortening of the limb to the extent of two inches, slight eversion, crepitus, but only when the limb was fully extended, and considerable swelling of the soft parts.

On *post-mortem examination*, the fracture of the neck appeared to have taken place at the anterior intertrochanteric line. The neck was united by extensive bony deposit, with the shaft at an angle of 85° , and was thrown obliquely downwards and forwards from its original position, so that its lowermost portion was more than half an inch in front of the shaft of the bone, and all but in a line with its external surface. Immediately below the outer two-thirds of the lower border of the neck was the originally separated smaller trochanter, surrounded by an irregular ossific deposit, connecting it to the inner and back part of the shaft. The great trochanter had been fractured into two unequal portions, both of which had been pushed somewhat forwards and inwards. The larger division was limited below by an irregular transverse depression an inch long, extending transversely outwards from the middle of the posterior intertrochanteric line; and above, behind, and to the outside by an oblique depression, indicating the line of fracture between it, and the smaller separated fragment. The neck and fractured trochanters were held in firm union by an irregular bony deposit.

MR. NATHANIEL WARD, 20th of January, 1852.

7.—*Case of Diseased Hip-Joint, in which Excision of the Head of the Femur had been performed.*

The patient was a child, aged eight years, who had suffered from the disease for four years, and in whom the femur had been dislocated on the dorsum of the ilium, with such displacement of the limb across the opposite thigh, that, even if she had recovered from the disease, she could never have used it, but whose health was so much affected that recovery seemed impossible, and in whom, in addition to the irritation of one or two sinuses, a large open sore over the trochanter seemed incapable of healing. The end of the bone was readily insulated by Mr. Hawkins, at St. George's Hospital, by a longitudinal incision, and was sawn across below the trochanters; at the outer edge of the acetabulum were two or three small pieces of loose bone, which were removed by dressing-forceps, and the rest of the socket seemed to be filled up with soft substance, without any appearance of further disease;

the child died, however, three days afterwards, having never entirely rallied from the time of the operation.

The head of the thigh-bone had been partially absorbed, but no part of it was necrosed, and soft union had taken place between it and the surface of the ilium; the socket was much filled with organized soft deposit, and none of the bone was diseased, but in the centre a perforation was found, as large as the end of the finger; and on dissecting from within the pelvis, the periosteum was found to be thickened, and a small quantity of pus was contained between this structure and the inner surface of the acetabulum, communicating with the central opening through the bone. No disease existed elsewhere.

Mr. CÆSAR HAWKINS, *2nd of March, 1852.*

8.—*Two cases of complete Osseous Anchylosis of the Hip Joint.*

One was taken from a lad, who died of phthisis and scrofulous disease of the kidneys and bladder, having several years before suffered from disease of the hip-joint. The anchylosis was so perfect that no trace whatever remained of any part of the two articular surfaces formerly existing, the cancellous structure being in that half-atrophied condition in which the cells are of very great size; the outer shell of bone, belonging to the femur and innominatum, being thin and delicate.

The other was taken from a patient of Mr. Hawkins, who was admitted, at the age of eighty-two, into St. George's Hospital, with a simple fracture of the thigh bone, below the trochanters, and who had always been lame since the receipt of an injury by a fall sixty years previously. He was restless and imbecile, and becoming gradually weaker, died with slight erysipelas of the face seven weeks after the fracture.

On external examination, the head of the femur, united by bony anchylosis to the acetabulum, was apparently flattened and enlarged, and presented a good deal of irregularly-formed new bone around it, and round part of the neck, but showed no sign of having been fractured; the recent fracture was nearly ununited in consequence of his age, and his incessant removal of his splints. The section of the innominatum and femur showed that they

were so joined by ankylosis as to form one bone, the cancellous tissue being compact and strong, and the cells smaller and more compact than the ordinary appearance of the pelvic bone; at one part a faint semicircular line marked the situation where the articular surface of the head of the femur, or that of the acetabulum, had formerly existed. There appeared, therefore, to have been considerable inflammatory action, and consequent consolidation, and external bony deposit at the time of the injury, at which time the patient was twenty-two years of age; in this respect it showed a great contrast with the other specimen, which was the result of disease during childhood.

Mr. CÆSAR HAWKINS, 2nd of March, 1852.

9.—*Necrosis of the Fractured Ends of the Tibia. Separation of the Exfoliation of the Lower Portion (cut off from its supply from the Nutritious Artery) thirteen months later than the Necrosis from the Upper Portion.*

T. C., aged fifty-one, a labourer, was admitted into the London Hospital under Mr. Curling, April 29th, 1850, on account of a fracture of the left leg, about its middle, produced by the limb having been jammed between a mast and the side of a barge. The integuments were consequently much bruised. After the limb was set, the patient became restless and moved his leg about so much that it was impossible to prevent his displacing the broken ends of the bone. The integuments inflamed and formed a large slough, which separated in about ten days after the accident, exposing the broken ends of the tibia denuded of periosteum and necrosed. By the end of August the limb became tolerably firm from the union of the fractured fibula and the posterior part of the tibia.

The necrosis of the upper fragment of this bone became loose, and was removed September 30th. It consisted of the anterior wall of the tibia, and a small portion of the cancellous structure, measuring two inches in length. The dead bone at the lower end of the tibia continuing firm for a long period, the patient was discharged in January 1851, and admitted into the Stepney Union. On visiting him on the 30th of the following October, Mr.

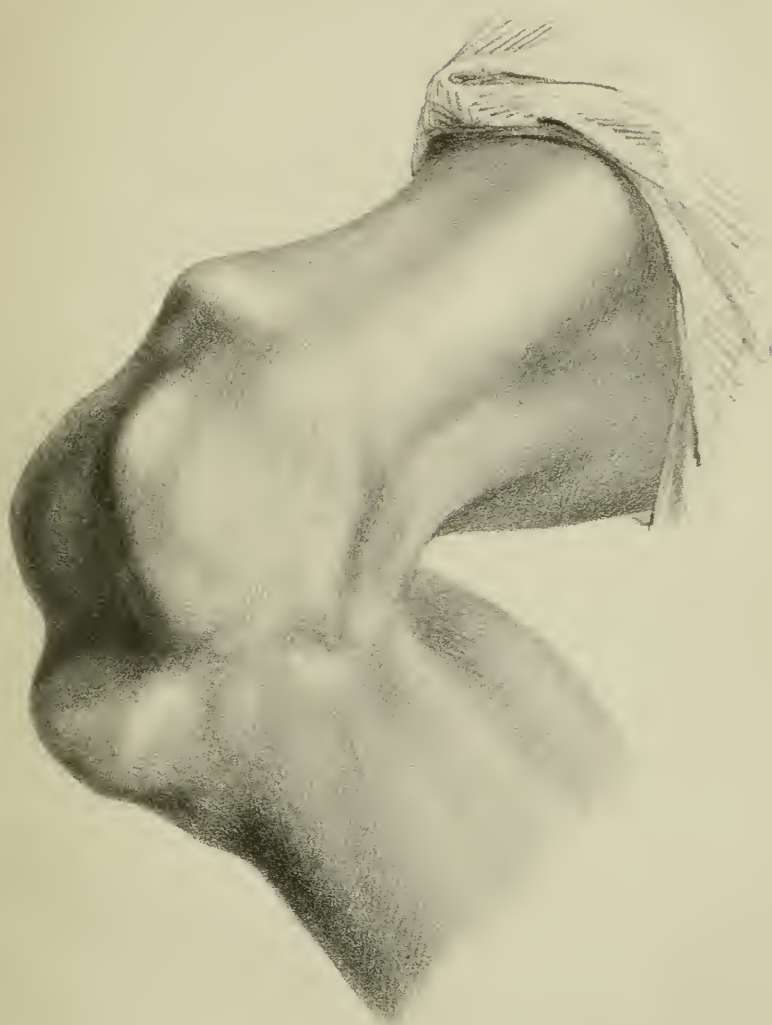
Curling was surprised to find the dead bone still in the leg. The attending surgeon, he was informed, had made several attempts to extract it without success. It projected a good deal, and seemed loose; grasping the bone firmly with the forceps, and using some amount of force, he removed it eighteen months after the accident. The necrosis consisted of about half an inch of the anterior wall of the tibia, with a spiculum two inches in length extending from it. It was altogether a good deal less in size than the upper exfoliation.

In a paper on "Atrophy of Bone," published in the 20th volume of the "Medico-Chirurgical Transactions," Mr. Curling showed that the portion of a fractured bone, deprived of its supply of blood from the medullary artery, atrophied, the walls becoming thin and the cells widened, and he instanced amongst others, specimens of the tibia in which this had taken place in the lower portion which had been so circumstanced. These specimens of necrosis furnish a further and striking illustration of the impaired nutrition of bone consequent on a diminished supply of blood, the separation of the necrosis from the lower portion of the tibia having occupied thirteen months longer than the exfoliation from the upper portion.

Mr. N. WARD for Mr. CURLING, *2nd of March, 1852.*

10.—*Rupture of Uniting Ligament after Fracture of Patella.*

Mr. Shaw brought for the inspection of the Society, a man, aged forty-nine, whose left knee presented a remarkable appearance consequent on extensive separation of the fragments after fracture of the patella. (See Plate XI.) Twelve years ago he had transverse fracture of that bone; in two months the portions had united by ligament with scarcely any interval; for six months subsequently he wore a splint; and after that period he had good use of his limb. Twelve months from the accident, he fell and tore the connecting ligament, the upper piece being dragged at the same time to its present position in the thigh; he kept his leg at rest, without surgical aid, for a fortnight, when he returned to his work; and having been provided afterwards with a knee-cap, he has continued in active occupation without



Retraction of the upper fragment of a previously fractured patella,
after rupture of the ligamentous bond of union.



interruption. The upper fragment is situated about four inches above its proper place ; and the fibres of the quadriceps extensor cruris being much wasted, the shape of the femur can be partly distinguished by the eye. Owing to the retraction of the upper fragment of the patella, the only structure which covers the front of the knee is the skin, lined, it may be presumed, on its under surface, with a fibrous and synovial membrane ; but these structures are so thin, and fit so closely, that when the patient bends the knee, the shape of all the lower head of the femur, except its back part, becomes distinctly visible ; the tubercles and ridges of both condyles, the articular surfaces, and the intercondyloid fossa nearly to the origin of the external crucial ligament, can be readily distinguished by the sight ; the boundaries of the articular surface of the tibia can also be easily recognised. Notwithstanding the absence of an efficient point of insertion for the extensor muscle into the tibia, the patient does not halt much in his gait ; he follows an occupation that requires a good deal of walking ; and he gave instances of his walking thirty miles in the day. However, it is only by swinging the leg forward, as he advances the thigh in walking, that he can straighten the limb ; he has no power of extending the knee, when bent as in the sitting posture, except by employing the hand. He does not often fall ; but is most in danger, if he miss his step, of falling backwards. The knee-cap that he wears is a slight elastic one, of the common construction.

Mr. SHAW, 17th of February, 1852.

11.—*Necrosis of the Tibia.—Amputation.*

A boy, aged fourteen, received five months before his coming to the hospital, a sharp blow on the front of the tibia. This was followed by pain and swelling, and the formation of abscesses, which broke and terminated in sinuses communicating with the bone in various parts of its length. Through these sinuses a portion of necrosed bone, five inches in length and immovable, could be felt. A probe passed, through an opening very near the knee-joint, into the cancellated structure, which was considerably enlarged by deposit of new bone quite close to the

ankle-joint. The limb altogether was emaciated, and the knee-joint ankylosed at an angle, and otherwise deformed. The patient showed the strumous diathesis in a marked degree. His inferior maxillary bone was considerably enlarged on the right side, also from a blow. In consequence of the immovable condition of the necrosed portion of bone, the evidence of the disease extending upwards close to the knee-joint and downwards close to the ankle-joint, the ankylosed state of the knee-joint, and the marked strumous habit of the boy, amputation above the knee was preferred to the attempt to remove the sequestra. A section of the bone in its entire length showed a large sequestrum five inches long, and occupying nearly half the thickness of the shaft, firmly impacted. It might, however, have been removed without much difficulty, although this would have been of little service, in consequence of there being a considerable piece of dead bone above near to the knee-joint and below near to the ankle-joint. These two portions were surrounded by thick curdy matter, closely resembling scrofulous matter, but shown not to be so by the microscope. The epiphyses above and below were not diseased. The knee-joint was completely ankylosed by firm adventitious tissue. The boy did well.

Mr. AVERY, 10th of May, 1852.

12. *A Congenital Stump, Amputation below the Knee.*

A boy, aged thirteen, suffering much from excoriation and injury to a very conical congenital stump, desired its removal. On making a section of the stump, the tibia and fibula were found quite separate, presenting a natural condition of their structures to their terminations, thus appearing to offer an example of amputation, in utero, rather than of arrest of development.

Mr. AVERY, 10th of May, 1852.

DISEASES OF THE EAR.

1.—*Congenital Malformation of the external Ear and Meatus on each side.*

M. A. J., aged twenty-two, was sent to Mr. Toynbee by Dr. Theophilus Thompson, in order that he might examine her ears, and give an opinion respecting the propriety of an operation. Upon examination, the right ear was observed to consist of a fold of integuments about an inch and a-half long, the upper portion being somewhat curved : about the middle of this fold anteriorly was an orifice, which admitted the rounded extremity of an ordinary-sized probe ; it terminated in a *cul-de-sac* at the depth of a line and a half. On placing the finger over the situation of the external meatus a shallow depression was felt. The left ear, like the right, consisted also of a fold of integument, which contained a small portion of cartilage ; it was much smaller, but it had more of the form of the natural ear. There was no appearance of external meatus, nor was any depression felt in its ordinary situation. The mastoid process on each side was fully developed : the zygomatic arch appeared to be absent. The distance between the mastoid process and the molar prominence was remarkably short, and the patient had a peculiar square-shaped face. Upon experimenting respecting the hearing power, Mr. Toynbee found that, at the distance of a foot from the head, the patient heard ordinary conversation perfectly well ; beyond that distance, she could not catch the voice. It did not appear that she heard better in the vicinity of the ears ; on the contrary, she stated that, when the voice was directed to the back of the head, she heard better than when it was at the same distance opposite to the ears. Mr. Toynbee observed, that it would be remembered by the Members of the Society that he laid before them in the session of 1847 the account of the dissection of a child in whom there existed a deformity similar to the present. In that case and in two others which have been dissected, one by Dr. Jäger, and the other in the Anatomical Museum of the University of Edinburgh, a similar condition of parts was manifest, *i.e.* the tympanic element of the temporal bone was absent, and the only vestige of the external

meatus was a narrow fissure, at the bottom of which was a dense membrane. There was no appearance of membrana tympani. From what has been stated, it could not be anticipated that much relief is to be gained by the performance of an operation : indeed, when it is borne in mind, that dissections of similar cases have shown that the tympanic cavity is covered in externally by a firm layer of bone, and that the only rudiment of a meatus is a narrow fissure, filled by a dense fibrous membrane, it is not to be supposed that the removal of the integuments could materially improve the power of hearing. In the present case, a crucial incision had been made over the site of the external meatus, and the surface of the bone exposed ; the improvement to the hearing was, however, very slight ; it did not materially facilitate her communication with those around her, and consequently the margins of the incision were allowed to unite. The only cases of this malformation in which it appears desirable to perform an operation are those where the external ear hangs forward, and a considerable amount of deformity is produced.

Mr. TOYNBEE, 4th of November, 1851.

2.—*Calcareous Matter in the Cavity of the Vestibule.*

This was taken from an old man who had been very hard of hearing for a considerable time. The stapes was ankylosed to the fenestra ovalis. The masses of crystals in the vestibule were very much larger than natural, and among them were found portions of calcareous matter, having an irregular shape and a cellular surface, on which were observed some of the crystals.

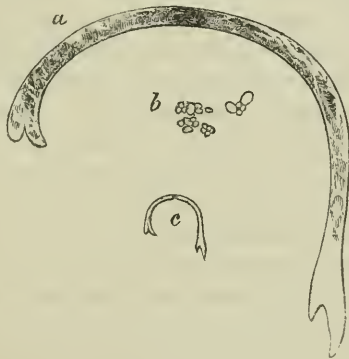
Mr. TOYNBEE, 4th of November, 1851.

3.—*Examination of the Ears of a Deaf and Dumb Child, in which a portion of one of the Membranous Semicircular Canals was distended with Otoconia.*

The following particulars of the case were sent to me by Dr. Ormerod, of Brighton, to whom I am indebted for the opportunity of making the dissection. The ears belonged to a girl, aged

sixteen, she was sharp and intelligent. Her parents stated that she was born deaf; but the child, on the contrary, said that this was not the case, and that she had heard sounds. Her teacher thought her own statement to be the most probable, because she formed many words according to their sounds, and he believed that she did, even after her admission into the Deaf and Dumb School, hear some sounds. None of her relatives were known to be deaf or dumb.

Upon making a careful dissection of each ear no deviation from the normal condition of the organs was observed, so far as the meatus externus, membrana tympani, and tympanic cavity were concerned. The stapes adhered with its usual degree of firmness to the circumference of the fenestra ovalis, the membranous lining of the vestibule was healthy, as also were the semi-circular canals, with the exception of the superior one in the right ear, which at about its middle was to the extent of a quarter of a line completely filled by a collection of otoconia (ear crystals), see Figs. *a. b. c.* These crystals are not generally



a. The membranous semicircular canal, magnified. *b.* Otoconia, $\times 450$.
c. The canal of its natural size.

supposed to be present in the semicircular canals; but, as Todd and Bowman have pointed out, they certainly may always be detected, although they are scattered widely. The mass of crystals in the preparation laid before the Society was so compact as to

obstruct entirely the continuity of the canal ; it could be seen by the naked eye like a small white spot. Towards the circumference of this mass the crystals were observed to be more scattered and they were found throughout the whole of the canal aggregated into small masses, but these were not of a sufficient size to obstruct the continuity of the canal. The individual crystals do not deviate from their normal state.

From accidental circumstances it was impossible to ascertain whether the superior semicircular canal in the left ear was similarly affected.

Mr. TOYNBEE, 17th of February, 1852.

4.—*Disease of the Base of the Brain, extending from the Tympanum through the Labyrinth.*

Mr. R. B., a German, aged twenty-six, short and in robust health previous to the attack which caused his death, had been annoyed for four or five years with occasional pain in the right ear, and by constant discharge. Three weeks previous to his death he complained of pain in the head, which, however, disappeared upon the occurrence of an abundant discharge. Twelve days before his death he was suddenly seized with a pain in the head, which lasted until I saw him, *viz.*, two days before he died ; a week after the attack he complained of a constant pain at the back of the neck, which extended as low as the sixth dorsal vertebra, and for about the same time there was paralysis of the right side of the face. For several days there had been a considerable shivering at two o'clock.

On the evening of March the 28th I saw the patient for the first time ; he was very restless, and complained much of pain at the back of the neck ; the right facial nerve was paralysed, pulse 85.

March 29th, 9 P.M. The symptoms have materially increased, the pain at the back of the neck is very great : squinting, which came on yesterday, continues. At three o'clock to-day he became insensible ; he can, however, be roused when spoken to in a loud voice ; he then speaks rationally for a minute, and afterwards talks incoherently. Discharge from the ear abundant and fetid. Pulse 85.

March 30th, 4 30, P.M. Very much worse. Right side of the body paralyzed; breathing stertorous; he gradually became insensible, and died at 8 P.M.

Autopsy twelve hours after death.—The cerebrum was healthy, excepting that there was a considerable quantity of chocolate-coloured serum in the lateral ventricles. The cerebellum was also healthy. The arachnoid surface of the dura mater covering the superior and mastoid parts of the petrous bone was in a natural state, but upon removing it from the bone it was found at two points to be softer than natural. Upon examining the base of the brain there was evidence of very extensive disease. Purulent matter was deposited between the arachnoid and pia mater from the roots of the olfactory bulbs anteriorly to the medulla oblongata posteriorly. In some parts this pus was of a dark colour, and in others, *viz.*, over the pons Varolii the arachnoid was ulcerated. The principal disease was on the right side of the pons varolii, the substance of which was ulcerated to the depth of a line to a line and a half, over a surface as large as a sixpence. All the nerves were surrounded by pus, and the substance of the right facial and auditory nerves was so softened down as to be scarcely distinguished from purulent matter. Upon examining the petrous bone, the dura mater, around the meatus auditorius internus, was observed to be soft, and detached from the bone, which was bare. The portions of the auditory and facial nerves in the meatus were in a state of suppuration. The cavity of the tympanum contained two portions of carious bone, one of which projected towards the cavity of the cerebrum, the other to that of the cerebellum; it was full of thick purulent matter, having a dark colour. The membrana tympani was entire; the stapes was attached to the margin of the fenestra ovalis, and the membrane of the fenestra rotunda was also entire. On the inner wall of the tympanum there was a carious orifice, not larger than a small pin's head, which communicated with the horizontal semi-circular canal, which it is known at this part slightly projects into the tympanum. Through this small orifice the disease had extended to the labyrinth, which was full of fetid pus, and from the labyrinth the disease had spread to the auditory nerve, and thence to the base of the brain. The patient was attended by

Mr. Such, Mr. Coulson, and myself, but the most active treatment did not produce any amelioration in his symptoms.

Mr. TOYNBEE, 6th of April, 1852.

5.—*Necrosis of the Squamous portion of the Temporal Bone, originating in Catarrhal Inflammation of the External Meatus.*

J. R., aged thirteen months, of scrofulous appearance, was admitted under my care at St. Mary's Hospital, on the 12th of February this year, on account of an affection of the right ear. The mother stated that since the child was six weeks old a discharge had been observed to take place from this ear; this discharge had disappeared now and then for a few days. Three weeks ago an abscess formed at the back of the ear, which opened into the meatus. Upon examination, the surface of the meatus was seen to be red, and its substance so much tumefied that it could not be ascertained whether the membrana tympani existed. The discharge consisted of pus and epidermis. The ear was ordered to be syringed with warm water; afterwards gentle astringents were used, and cod-liver oil was administered. For nearly a month the child was better, the ear discharged less, and there appeared to be less uneasiness in it. On the 15th of March the child appeared to suffer pain in the ear, and this pain increased; the child moaned, cried, and rolled its head; after some days it began to start in its sleep, the crying became almost constant: vesicating paper was applied behind the ear after the use of leeches. On the 19th of April there were several fits of shivering; these fits recurred, the head symptoms increased, and the breathing became greatly appressed. Towards the end of April these symptoms grew more prominent, and the child died on the 29th, having suffered from convulsions the day previously,

Autopsy.—The lining membrane of the external meatus was of a purple colour, and although it was not ulcerated, it was detached from the surface of the bone, which was carious. Above the meatus, and extending over a part as large as a shilling above the meatus, the squamous portion was necrosed, and this necrosis extended to the cavity of the skull, where a portion in the same state, as large as a sixpence, was seen. The outer surface of the

dura mater covering this necrosed bone was soft, and the arachnoid membrane, covering its inner surface, was much inflamed, and on its surface was seen a delicate layer of lymph. Tubercles were found in the lungs and mesentery.

Mr. TOYNBEE, 4th of May, 1852.

6.—*Cholesterine in the Mastoid Cells.*

The patients from whom these preparations were taken, were both more than sixty years of age, and had been the subjects of inflammatory disease in the tympanic cavity.

In specimen No. I., the membrana tympani had been destroyed by ulceration, excepting a small semicircular portion at the upper and posterior part; a membranous band then connected the lower extremity of the long process of the malleus to the promontory; another band connected the stapes to the inner wall of the tympanum. The cavity of the mastoid cells was separated from that of the tympanum by a broad band of membrane, and the anterior and upper part of the cells formed a cavity which was lined by a shining metallic-looking substance, which, when examined by the microscope, was found to consist of crystals of cholesterine.

In specimen No. II., the membrana tympani was white like parchment, thick, and concave. The tympanic cavity contained some muco-serous fluid; the lining mucous membrane was thick; numerous bands connected the membrana tympani with the inner wall of the tympanum; the upper part of the mastoid cells was converted into a circular cavity, which contained a green fluid; upon examination this fluid was found to consist of cholesterine.

Blood was effused around the auditory nerve in the internal meatus.

Mr. TOYNBEE, 18th of May, 1852.

MISCELLANEOUS SPECIMENS; TUMORS, CLUB-FOOT, &c.

1.—*Crystals formed on the surface of the body previously to death by Cholera.*

A FEMALE, tall and spare, aged sixty-five, in the summer of 1848,

after many years' extreme suffering from disease of the right knee-joint, had the limb removed by Mr. Obré : she made a rapid recovery, and continued in good health until the night of the 18th of September, 1850, when she was attacked with cholera, and was treated by Mr. Britton, of St. John's Wood. On the 20th she was visited by Mr. Obré, who found her in a state of extreme exhaustion : the cramps, vomiting, and diarrhoea had subsided, but the voice was hoarse, pulse low, and no urine had been passed since the attack began : on the 23rd, low fever made its appearance, and the cerebral functions became impaired : three ounces of urine were passed, being the first since the 18th ; camphor was prescribed. On the following day four ounces of urine were drawn off by the catheter : in the afternoon, when visited, the pulse was found imperceptible and the extremities cold. She continued in this state until about eight o'clock the following morning, when the surface of the body was observed gradually to resume its heat and become warm, with a general redness, described by her family "as if in a state of fever." They observed that the face became covered with small white particles, which, when wiped off, were soon reproduced. Mr. Britton (who on entering the room asked "had the face been powdered?") found this unusual appearance was owing to the presence of small crystals, which, though most abundant on the face and neck, covered more or less the entire body. The formation of the crystals continued until two o'clock P.M., when she died, having been comatose for twenty-four hours. Mr. Obré visited her half an hour after death, and found the crystals beginning to deliquesce, but still generally diffused over the face and forehead. Two days after death, on visiting the body, it was found quite damp and the hair wet, from the deliquescence of the crystals. On examination, the crystals were found to be soluble in ether and alcohol, and to form a soapy substance on being rubbed with alkalis : exposed to heat, they melted and became transparent : when burnt, they left a slight ash. No traces of uric acid or urates were found : under the microscope they had not the appearance of saline crystals, but rather that of stearine or some fatty matter, which is no doubt their essential composition : it was at first supposed, that the crystals were the results of the

salts of the suppressed urine, having made their appearance in the cutaneous secretions, which then crystallized on the surface.

Mr. OBRÉ, 17th of October, 1851.

2.—*Specimens of the Filaria Medinensis—the Guinea Worm.*

These had been removed from black soldiers at Cape Coast Castle, where the complaint had been known to be exceedingly prevalent, and showed itself most frequently in the legs; accompanied by great pain and circumscribed inflammation, which very commonly terminated in suppuration. This entozoon has been observed in other parts of the body, as the scrotum, eye, feet, &c.; and the cellular is the particular tissue in which it is found. When the pus which eventually frequently surrounds the worm is let out, the parasite is laid hold of, and a piece of thread tied to it, which is fastened to the leg, and by daily traction more and more of the body is drawn out, until at last it is entirely removed, great care being taken to avoid breaking the creature. It is also sometimes gradually coiled round a quill, and thus withdrawn. Dr. Beith exhibited another specimen, in which the *Filaria Medinensis* was seen lying *in situ* in coils in the areolar tissue around the tendo Achillis and the lower part of the muscles of the calf of the leg. The specimen was found by Mr. Busk whilst making a minute dissection of the nerves of the leg of a negro lad who died of tetanus on board the Dreadnought. No symptoms existed during life which could indicate the likelihood of its presence. Dr. Beith referred to an interesting paper on this parasite by Mr. Busk, in the "Transactions of the Microscopical Society," Vol. II. p. 65. Dr. BEITH, for Mr. DICKSON, Nov. 18th, 1851.

3.—*Two specimens of Fluid Fibrin.*

In the first case the fluid when recent resembled pus, but upon a microscopical examination by Dr. Quain it was found to consist merely of minute granules, some of which were aggregated into small masses, as large as blood-globules, but destitute of an organization or cell-formation. These particles were partially dissolved by acetic acid.

The second specimen was derived from the blood which flowed from an incision into the leg of a patient affected with a low kind of erysipelas accompanied by inflammation of the femoral vein. The blood which flowed was observed, when received into a basin of hot water, immediately to separate into its different portions. The fibrin was left in shreds, quite decolorized, while the other parts were diffused through the water. Some of the fibrous shreds were placed in a bottle for examination. On the following day the whole of the fibrin thus collected was found reconverted into a fluid state.

This specimen was examined by Mr. Quekett, and was found to contain a large number of granular bodies, of a circular form, and from two to four times the size of the blood corpuscles.

Mr. HENRY LEE, *2nd of March, 1852.*

4.—*Cancer, with rapid Destruction of the Breast and adjacent parts.*

S. W., aged thirty-seven, a small, delicate-looking woman, was admitted into the Royal Free Hospital, July 11th, 1851.

She had been married seven years, and was the mother of several children. Her health had been good until about ten months since, when, during a severe fit of coughing, her attention was drawn to some soreness on the left breast. At this time she became pregnant, and with the increase of the mammary glands, she observed that the left breast increased more rapidly in size than the other; this enlargement was attended with severe pain. Mr. Paget saw it at this time, as did some other surgeon in her neighbourhood, and both pronounced the affection to be cancerous. Her sufferings increased, and became so severe, that, in comparison with them, she said the pains of labour were scarcely worthy of consideration. The skin covering the gland had become of a dull purple colour; and in this condition she was removed to one of the Metropolitan Hospitals. According to her statement, ice was applied to the breast constantly for a week; and as from this and other treatment she appeared to gain no relief to her sufferings, she was removed to the Royal Free Hospital, where through the courtesy of my colleague, Dr. Mars-

den, I had the opportunity of watching the further progress of her case.

At this time the mamma was about double its ordinary size, of an uniform deep purple colour, smooth and shining on its surface, having the nipple erect, immoveably fixed to the walls of the chest, and cold. An unhealthy-looking small ulcer had just made its appearance beneath the nipple. The skin immediately surrounding the breast and extending farther in the direction of the arm-pit and shoulder than in other directions, was also of the same purple colour, and had a brawny feel, and the left arm was œdematous. The pain was excessive and constant. Her condition, that of extreme debility, and that of the breast, remained almost stationary until the 22nd of July, when the ulcer became a kind of deep fissure across the breast as far as the edge of the arm-pit. From this time pieces of sloughing and decomposed tissue began to separate; these became larger as the destructive processes were observed to extend deeper. On the 27th, large masses of the pectoral muscle came away, and on the 28th it was evident that an opening had been made into the pleura costalis. The front portions of two ribs were now brought into view. These speedily became necrosed, and their sternal articulations destroyed. The wound continued to increase in all directions save towards the sterno-clavicular articulation, where it showed some signs of commencing granulation. Her breathing now became exceedingly laboured; her strength began rapidly to give way; and she died on the 3rd of August, just twelve days after the commencement of the process which had proved so rapidly and fatally destructive.

Portions of the masses which separated were from time to time examined by the microscope, but nothing beyond the ordinary products of inflammatory action could be discovered.

A *very limited post-mortem* examination was permitted; and the only lesion that could thereby be detected was a *clot* of blood which had occluded the axillary vein, evidently of recent formation.

Mr. GAY, 18th of May, 1852.

5.—*Portions of different Bones found in a Congenital Tumor.*

On the 2nd of August, 1851, I was requested by Sir Benjamin

Brodie to examine the body of a gentleman, aged forty-one, who died the day previously, having been born with a pendulous tumor attached to the lower part of the vertebral column.

No parts of the body, which was extremely emaciated, were examined, except such as were in immediate connection with the tumor.

The tumor, which had previously varied in size, was occasionally as large as a man's head, and had the appearance, after death, of having shrunk considerably; it was attached above to the inner surface of the lower part of the sacrum, projecting considerably below the apex of the os coccygis and the anus, it pressed on the rectum anteriorly, while it caused a distinct displacement of the sacrum, which projected preternaturally behind. The tumor itself was composed partly of solid matter of a fibrous character, but chiefly of cysts, which contained adhesive semifluid matter mixed with pus of an offensive odour. Imbedded in its substance in different parts of the tumor were a considerable number of small portions of bone; one having a good deal the appearance of an imperfectly formed vertebra, another might be supposed to be an imperfectly formed rib, a third to be a piece of the cranium, whilst others had no definite character.

There were communications between the tumor and rectum, and the lower bowels contained a quantity of hardened feces; there was no connection between the tumor and the bladder.

Mr. Tomes, who has examined portions of the bones with the microscope, states that they are perfectly formed bones, which microscopically could not be distinguished from a section taken from a bone of an ordinary skeleton.

The following history of the case, Sir Benjamin Brodie has permitted me to copy from his note-book:—

“The patient was born in 1810, having a large congenital tumor attached to the inner surface of the sacrum, and projecting below, making a large protuberance at the posterior part of the pelvis. I was consulted about him either in the year 1819 or 1820, with the late Mr. Chilver the tumor occasioned a considerable deformity, which he endeavoured to conceal by a particular kind of dress. I saw nothing of him from this time until

1836 : he was then married, and ultimately had two children in every respect perfectly formed. The tumor consisted of solid matter, with cysts of fluid, and was liable to occasional attacks of inflammation ; one of the cysts gave way, and discharged a gelatinous and adhesive fluid. From this time he always suffered more or less inconvenience from occasional attacks of inflammation ; and two or three years before his death, contrary to my advice, a surgeon made an incision into the tumor, which not only answered no useful purpose, but left him in a worse state than he was before. Different cysts suppurated, discharging pus and adhesive fluid ; sometimes a collection of fluid and pus pressed on the rectum, occasioning a difficulty of expulsion of the fæces, and then discharging its contents into the bowel ; after this he was always in a state of greater or less suffering ; he lost flesh ; had occasional attacks of fever, and at last he sank and died on August 1, 1851."

Dr. Brewer saw the patient also for about six weeks prior to his death, and tells me that during that period the patient suffered from very distressing vomiting, and also most obstinate constipation of the bowels, which he imagines was caused by the quantity of opium he had taken to allay the pain in the tumor, which was very considerable.

This case, though by no means a very uncommon one, I have thought of sufficient interest to bring before the Pathological Society ; during life it excited considerable interest. The opinions of Mr. Clive, Sir Astley Cooper, Mr. Abernethy, and others, and, latterly, of Mr. Stanley and Mr. Fergusson, had been obtained with regard to it. As far as I know, the most complete account of these congenital tumors of the pelvis, is given by Mr. Stanley, in vol. xxiv. of the "Medical and Chirurgical Transactions." There is a case very similar to this one recorded in vol. xlv. of the "Philosophical Transactions." And I have no hesitation in placing this case in Mr. Stanley's second class, viz. :—

"The cases wherein the tumor is composed of morbid structures in conjunction with isolated portions of perfectly formed animal organs having no other relation to the living being with which they are connected, than as they are dependent on it for means of nutrition and growth. These cases must be considered

to belong to the class of parasitic monsters, constituting intra-fœtation, the inclusion of one fœtus within another, and, in accordance with the present theories on this subject, supposed to result from the cohesion or intus-susception of germs, when more than one ovulum is contained in the same vesicle, under which circumstances there will come either the union of two perfect fœtuses, as in the instance of the Siamese twins, or the growth of one fœtus to its perfect form, with but a portion of another fœtus attached to it, as in that remarkable case recorded by Velpeau, where a tumor which was removed from the scrotum of an adult was found to consist of several bones, and other distinct parts of a fœtus."

Mr. CHARLES HAWKINS, 3rd of February, 1852.

6.—*Encephaloid Tumor of the Fore-arm, involving the Deep Flexor Tendons.*

A leuco-phlegmatic labourer, aged twenty-eight, came under Mr. Ward's care on the 30th Jan. with a tumor extending from the annular ligament upwards to a little above the middle of the left fore-arm. It was irregularly oval in outline; and over its centre the integument was pushed forward to the extent of an inch and a half beyond its ordinary level—a little less above and below; the radial and ulnar arteries could be felt pulsating on its side, but both were pushed forwards. The tumor was very tense, and yielded somewhat on pressure. The sense of fluctuation was so marked as to give those who examined it the idea of its containing fluid; the median vein, which ran over its centre, was much distended. There was no fulness at the back part of the fore-arm, the radius and ulna appearing quite natural, with the exception of being more obvious than in the right arm, owing to the tension of the skin over them. The fingers and thumb were all but quite flexed on the hand, and any attempt on the part of the patient or surgeon to straighten them was attended with excessive pain. There was a good deal of heat on the surface of the fore-arm, but no inflammatory blush.

The patient stated that he had continued at work until six days before coming to the hospital, when the pain he experienced

was so great as to compel him to desist. He said that about twelve months ago, while at an iron foundry, a large bar of iron fell on the front of the fore-arm, grazed the skin, but did not hurt him much; the wound soon healed without his being obliged to give up work. Five or six months afterwards a hard painful lump formed just above the wrist. This, however, soon disappeared, but came again in as short a time, and gradually extended up the fore-arm, giving him great pain, particularly at night. He could move his fingers without pain, but if he happened to touch the swelling, the pain then became exquisite, and he was obliged to drop anything that was in his hands. For the last three months a rapid increase has taken place; and he has lost flesh. The tumor had all the appearance of an enlarged bursa connected with the flexor tendons, with the exception that there was no fulness in the palm of the hand. Immediately after the admission of the patient a grooved needle was inserted into the tumor at the upper and lower part: through the upper opening came out in the groove of the needle some solid material—through the lower, a little dark thick blood; the microscope gave no evidence of malignancy.

The man was placed in bed for thirteen days with the left upper extremity on an inclined plane, and the fore-arm enveloped in a soft poultice; middle diet, opiates, and saline medicine were given. At the end of this time he was placed on the operation table, and an incision an inch in length was made into the tumor. The general appearance on section leaving no doubt of the malignant character of this affection, amputation was performed at the lower third of the arm.

On examination the tumor, which measured five inches in its long axis, was found situated behind the superficial flexor of the fingers, which, together with the median nerve and radial and ulnar arteries, were thrown considerably forwards. The deep flexor tendons and sheaths were imbedded in the tumor, so that they could not be isolated from it. It was separated from the radius by the flexor longus pollicis, and the pronator quadratus, the latter muscle also separated it from the lower part of the ulna; and a few fibres of the fleshy portion of the flexor profundus, from the upper part of that bone. It had, therefore, no

connection with the periosteum. On a vertical section being made, the tumor was found to have been enclosed in a somewhat dense cyst, and made up of different deposits. There were one or two large isolated patches of dusky yellow fibrinous deposit, analogous to that so frequently met with in chronic inflammation of the testicle, and a mass of coagulated blood at the upper and lower extremity, of the size of a filbert. The remainder was constituted of encephaloid deposit.

The chief points of interest connected with the case were, its resemblance to a thecal tumor; the distinct feeling of fluctuation which was such as to deceive every one who examined it; its being unconnected with the bone or periosteum; and the negative evidence afforded by the microscope prior to operation; which arose from the circumstance of the exploratory needle having been plunged into the fibrinous portion of the swelling.

Mr. NATHANIEL WARD, 17th of February, 1852.

7. — *A Tumor of peculiar Structure taken from the Outer and Middle part of the Leg.*

This tumor, which had been growing more or less slowly for the last eight years, was removed from a cachectic-looking, emaciated female, twenty-eight years of age. It was of the size of an orange, and of the same shape, but flattened. It was elevated considerably above the surrounding skin, which might have been due to its being seated over the fibula; was closely adherent to the skin; had no cysts, and occupied the place of the usual fatty layer, which in this situation was entirely absent, although it existed sparingly amongst the tegumentary tissues in its immediate neighbourhood. As its attachments did not appear to be very firm, and the depth to which it reached could be distinctly made out, I removed it, and that without difficulty; but on raising it from the deep parts it separated, as though it consisted of laminæ, and when removed, a thin layer of similar tissue appeared to have replaced the deep fascia of the leg to the extent of the size of the tumor. This was carefully dissected off.

On examining the tumor immediately after its removal, it was found to be perfectly bloodless, of a firm homogeneous structure,

not laminated, and of the colour of ivory, whilst in density and elasticity it very closely resembled a piece of India-rubber. On submitting it to the microscope, having a power of 350 diameters, it appeared to consist of a net-work of very fine areolar tissue with a very large number of extremely delicate cells enclosing oil-granules, rendering it probable that it was a peculiar form of fatty growth or hypertrophy. Mr. Quekett has since examined this tumor, and has kindly favoured me with the following account of the results :—

“I have made many examinations of your tumor, and have tried the action of boiling ether, alcohol, and dilute muriatic acid upon it. These agents seem to take no other effect upon it than to bring out a cellular stroma or matrix more plainly than you saw yesterday. There is a good deal of oily matter in the form of globules mixed up with the stroma. These the ether partially dissolves, but there are numerous highly refracting globules that can be detached from the stroma, which neither liq. potassæ nor ether attacks. These make up the greater part of the mass of the tumour. Amongst them may occasionally be seen other cells as large as globules of mucus, that appear to be full of the same dark granules.

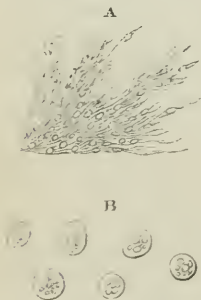
“I have never seen a tumor from the human subject at all like it ; but there is one in the Museum from the belly of an ostrich that comes very near it in structure, and I have seen a somewhat similar substance in parts of the vertebræ of many of the large cartilaginous fishes.” Mr. GAY, 14th of May, 1852.

8.—*A tumor removed from the Thigh.*

E. P., aged twenty-seven (married), admitted into St. Thomas's Hospital, under Mr. Solly's care, on the 23rd of March, 1852. Ten years ago she perceived a small swelling as large as a bean on the inner side of the left thigh. She married seven years since ; during her first pregnancy the tumor enlarged, but after delivery it remained stationary until she became pregnant a second time,—it then again enlarged, and became painful. After her second confinement it ceased to grow, but still continued somewhat tender. She became *enceinte* a third time. The tumor

then increased much more rapidly than it had hitherto done, grew much more painful, after her delivery remained so, and continued to grow, though in a less degree than during the period of her pregnancy. The last confinement occurred a few months before her admission.

The tumor, which was subcutaneous, when removed by Mr. Solly from the inner part of the thigh, was ovoid, about two inches and a half long, slightly nodulated externally and enclosed in a fibrous capsule about half a line (or less) thick. On section it was seen to be made up of cysts, and of intervening solid substance. The cysts were several in number, and about capable of holding a Spanish nut each. They appeared to be limited by a fibrous wall, the cyst-surface of which was lined and obscured by a soft, slightly fibrous, blood-stained material. The contents (so far as I could learn) was discoloured serum. The solid part of the tumor was abundant, and presented various appearances. In some parts were numerous clustered nodules, varying in size from that of a pea downwards. These consisted of a pearly white softish substance, and appeared to be enveloped in very delicate fibrous capsules—they were not, however, separated from one another. One nodule of this kind was discovered about one-third of an inch in diameter,



A. Nuclear fibres from small solid nodules.

B. Cells with orange-coloured granules from walls of cyst.

ter, broken down in its centre, and presenting an irregular cavity filled with recently coagulated blood. Some larger masses of solid substances were also present, irregular in shape and helping to fill up the intervals between the cysts—they consisted of a reddish spongy reticulum, having very much the characters of partially organized clot.

Microscopic examination.—The walls of the tumor consisted of dense fibrous tissue. The soft materials lining the cysts had an imperfectly fibrous appearance, the fibres, however, were softer and more irregularly arranged than in fibrous tissue, and mixed with them were numerous elongated nuclei. There were also many blood-corpuscles, and vast numbers of

granules of a golden-yellow hue, the largest of which were somewhat larger than a blood-disc. Many of these were clustered, and distinctly contained within cells. Fig. B.

The reddish spongy substance was made up of fibres forming a kind of areolar tissue, permeated by numerous large irregular blood-vessels, and presented likewise numerous yellow granules, free or enclosed in cells, like those before mentioned. The small solid nodules appeared to be made up entirely of nucleated fibres (fig. A); the nuclei were small — sometimes round, but generally much elongated; delicate blood-vessels might occasionally be seen, especially in the larger ones. Some portions of the larger nodules, were to the naked eye opaque and yellowish. This appearance was found to be due to the presence of numerous granules and granule-cells mixed with the other tissues.

On looking at the structures forming the tumor it seems evident that if any part is to be taken as a type of its original condition, that part must be the solid nodules, for had the cysts been the primary formations we ought to have found them, not of uniform and considerable dimensions, but presenting every gradation of size—the nodules, however, did possess this character. If, then, these were formed first, the cysts most probably originated in some way or other from them. The following, I believe, to have been the mode of formation. The nodules, consisting of soft, growing cellular tissue, having been once brought into existence, increased in size. With the increase of size there was evidently a tendency for those parts furthest from the capsule to degenerate, as was shown by the presence in them of the granule cells. This tendency was still further manifested in the largest of the nodules met with; for it presented in its centre an irregular cavity filled with recent clot, the arrangement of clot and surrounding tissue being precisely similar to that of a recent extravasation of blood into the structure of the brain.

It seems, then, that a disposition existed in the nodules to soften and break down at the centre, and to extravasate the contents of their vessels into the cavity thus formed. We have only to imagine a continuation of this process, and we have a cyst formed, having for its contents extravasated blood and broken down tissue; by extending the idea a little further we can see how these contents

might become absorbed, and be replaced by serum, the only remnant of them being a thin layer bounding the cyst. We thus arrive at a cyst exactly resembling those found in this tumor, and not unlike those which replace absorbed clots in the tissue of the brain. Indeed, I believe that the formation of cysts in this case resembled the formation of those in the brain. The microscopical characters of the soft layer lining the cysts were in accordance with this view—it had something of that want of definite appearance characteristic of transformed clot mingled with some of the characters presented by the tissue of the solid nodules. Moreover, it contained numbers of those cells containing yellow granules which are not unfrequently found connected with extravasated blood, and which are described by Kölliker as frequently existing in the spleen.

With respect to the *solid spongy material*, that may either have arisen in nodules which had continued to grow without breaking down, and been transformed somewhat, or it may be that the clot which replaced the original structure had, instead of undergoing absorption, become organized.

Dr. BRISTOWE, 6th of April, 1852.

9.—A Cutaneous Fatty Tumor.

This was removed by Mr. Brooke from the upper and anterior part of the thigh of a young married female, aged twenty-two. It was kidney-shaped, about two inches long, and attached by a small pedicle. There was very little sensibility to pressure, and became a source of inconvenience only when dragged by the clothes in the movements of the body. It was described to have existed from childhood as a small soft wart, and had begun to increase about two years since.

The appearance under the microscope was that of fibrous tissue interspersed with fat cells, and in this respect different from the more common subcutaneous fatty tumor.

Mr. BROOKE, 6th of April, 1852.

10.—*Double Talipes Varus, and Spina Bifida in a Fœtus at birth: also, The Bones of the Foot from an adult affected with Congenital Talipes Varus.*

I. The child lived only a few hours. The club-foot was of the most severe congenital form, both feet being rigidly drawn inwards and upwards beyond a right angle with the legs. Mr. Adams had dissected the right leg to exhibit the relative position and state of the muscles, tendons, and ligaments; and had removed the soft parts of the left to exhibit the relative position, and altered form of the bones. The chief points of interest with respect to the muscles, were the following. The gastrocnemius was large, but unsymmetrically developed, the internal head and half of the muscle being very much larger than natural, and the external head and other half of the muscle imperfectly developed; so that instead of there being a central raphé leading upwards from the tendo Achillis, the tendinous line passed towards the small external head. The inner half of the muscle could be easily cleaned on dissection, its surface being smooth and plump, as in well-nourished muscles of fine texture, while the outer half could not be cleaned from the quantity of fat mixed up with, and dipping between its muscular fasciculi, its condition evidently approaching that of the extensor longus digitorum. The tendo Achillis was of large size and extremely tense. The tibiales (anticus and posticus) muscles were fully developed, if not somewhat hypertrophied, and their tendons extremely tense. These three muscles were considerably shortened in their entire length, and after removal of the skin, &c., were capable of being elongated to only a slight extent, the tension of the tendons continuing. The extensor proprius pollicis was about, or rather below, its natural development, and its tendon was tense, but to a less degree than the anterior and posterior tibial tendons. The extensor longus digitorum and peroneus tertius might almost be said to be absent, as far as their muscular fibres were concerned; their tendons existed, but were of very small size, and connected above with an extremely attenuated layer of muscular fibres representing the extensor muscle; the muscular fasciculi were intermixed with fat dipping between them, so that their dissec-

tion could only be conducted to a very limited extent, and it was impossible to trace them to any connexion with, or origin from, the bones or interosseous ligaments. The space between the outer border of the *tibialis anticus* and the fibula, which should be occupied by the fleshy belly of the *extensor longus digitorum*, was entirely filled with fat, in which no muscular fibres were traceable even with the microscope; the existence of the rudimental portion of this muscle above described, was only demonstrated by the most careful dissection from below upwards, beginning from the tendons on the dorsum of the foot.

A microscopical examination of this thin muscular layer or rudimental portion of the *extensor longus digitorum* muscle, was made by Dr. Quain and Mr. Adams in this, and also in another similar specimen removed from the body of a child ten weeks old, similarly malformed. The results were alike in both cases, but the process was more advanced in the latter. The muscular fasciculi in the specimen exhibited were larger than the fasciculi of the healthy muscles of the corresponding thigh; the transverse markings were very indistinct, and in many parts not traceable, the sarcolemma containing a confused granular material studded in some parts with molecules of oil. In the other specimen, the muscular fasciculi could be traced degenerated and degenerating into a kind of fibro-cellular tissue mixed with oil-globules. Dr. Quain considered both the general and microscopical appearances to indicate a state of arrested development of the muscle, and subsequent decay and degeneration, similar to the process described by him as occurring in voluntary muscle in his memoir on "Fatty Degeneration of the Heart," in vol. XXXIII of the "Transactions of the Medico-Chirurgical Society."

The *extensor brevis digitorum* was in the same condition as the long extensor: traces of its muscular portion being found only on the most careful dissection. The *peronei* (*longus* and *brevis*) were moderately well-developed. Of the deep posterior muscles, besides the *tibialis posticus*, the fully developed condition of which has been described, the *flexor longus digitorum* and *flexor longus pollicis* were developed to about the normal size. The tendons were somewhat displaced in adaptation to the altered position of the foot; the tendon of the *tibialis anticus* crossed

the lower end of the tibia higher up and more internal than usual ; and the tendons of the tibialis posticus and flexor longus digitorum were placed on the outer surface of, rather than behind, the internal malleolus ; this process had a rounded form, without any angular margin, and the tendons passed obliquely across its rounded posterior inferior extremity.

With regard to the bones, the following conditions were found to exist in respect of their position and form. The os calcis occupied almost a vertical position from its tuberosity being drawn upwards by the gastrocnemius muscle ; its direction also was obliquely forwards and inwards, and its tuberosity was in contact with the fibula. In form also, this bone was somewhat altered, being regularly arched in the direction of its length ; the convexity being outwards in adaptation to the curved position of the foot.

The astragalus was tilted obliquely forwards and downwards,



FIG. A, 1, 2, 3, represents a healthy foetal astragalus, about the ninth month, in its superior, internal, and external aspects.

FIG. B, 1, 2, 3, represents similar views of the foetal astragalus here described.

and to a certain extent displaced from its socket, the anterior third of its superior articular facet being thrust on to the dorsum of the foot by the elevated position of the tuberosity of the os calcis. There did not appear to be any lateral obliquity in the position of the posterior half of the astragalus. This bone was

the only one presenting any very important deviations from the natural form, and these chiefly referable to its anterior half, which was disproportionately small from imperfect development, the comparison being made with a perfectly formed fœtal bone of the same period (compare fig. A, 1, 2, 3, with fig. B, 1, 2, 3). Instead of the head of the bone with its articular surface being developed in a line parallel with, though somewhat to the inner side of, the axis of the bone, the head and neck of the astragalus passed abruptly to the inner side; and the articular surface, instead of looking directly forwards, had a lateral, or slightly antero-lateral aspect. This lateral position of the articular surface of this bone was in evident adaptation to the altered position of the navicular bone and anterior half of the foot, by which it appeared to have been determined. This seemed to be a sufficient explanation, for it may rationally be supposed that the astragalus, in its cartilaginous state, having only an osseous centre, would mould itself during growth to the lateral position of the navicular bone, there not being any evidence of its altered form being dependent upon any defective power of development in the bone itself.

The superior articular surface of the astragalus was abnormal in form and position; it was elongated by the articular cartilage extending quite to the posterior edge of the bone, which was thin and attenuated, instead of being an obtusely rounded border; the posterior two-thirds of this surface only had entered into the composition of the ankle-joint, the anterior third being thrust on to the dorsum of the foot; this was indicated by a distinct transverse marking at the junction of the middle with the anterior third; the articular cartilage on the extruded anterior third was healthy and its boundary well-defined, but not so distinctly as the outline of those portions directly entering into the joints.

The lateral articular surfaces presented similar abnormalities, from the anterior portion of the bone being displaced towards the dorsum of the foot; the articular cartilages were extended towards the posterior border of the bone; the external articular facet was tolerably well developed, but the internal was very defective, being represented by only a very small and imperfectly defined plate of cartilage close to the posterior edge.

The navicular bone was drawn so far inwards by the tibialis posticus muscle directly, and the tibialis anticus, extensor proprius pollicis, and flexor longus digitorum indirectly, that its tuberosity was in contact with the internal malleolus. It was also partially rotated upon its axis from without inwards. This bone was unaltered in form.—The cuboid bone had neither suffered displacement, nor alteration of form—nor had any of the other bones of the foot. There was no contraction of the lateral arch of the foot.

The spina bifida in this case presented no special peculiarities. It occupied the lumbo-sacral region, and was of small size, the sac measuring little more than an inch in diameter. The skin over the sac was imperfect, a thin dark-brown coloured membrane forming the posterior parietes. The caudal extremity of the spinal cord, with its numerous nerves, traversed the cavity of the sac, the posterior spinal nerves passing directly to their distribution in the neighbouring integument; the anterior branches were reflected, and returned to their proper foramina, through which they passed to their normal distribution. The fluid contents of the sac could be easily demonstrated to be in the sub-arachnoid space by injection from below upwards, and above downwards. An aperture having been made in the dura mater of the cord, some distance above the spina bifida, fluid injected from the sac was seen to distend the arachnoid investing the cord; and when fluid was injected into the cavity of the arachnoid from the opening above adverted to, it passed beneath and raised up the serous membrane lining the sac, which admitted of being thus detached to a considerable extent anteriorly, but adhesions prevented its being raised towards the posterior part of the sac.

II. The second specimen exhibited consisted of the bones of the foot, with portions of the tibia and fibula, from an adult affected with congenital talipes varus of the most severe form.

From the marked resemblance between the adult and foetal bones exhibited, the description of the latter might suffice for the former in all the more essential points; the superadded phenomena were principally such as would be expected to result from perfect ossification taking place in the deformed position, together with the long continued use of the foot in progres-

sion. The os calcis occupied a nearly vertical instead of a horizontal position, and was curved in the direction of its length, the convexity being outwards. Its tuberosity was in contact with the fibula, and was extremely attenuated, ending in a conical extremity pointed upwards to the point of insertion of the tendo Achillis. On its outer surface was a new articular facet for the external malleolus, which articulated with the astragalus close to its posterior border and with the os calcis. The grooves for the peronei tendons were situated much behind their normal position, and were deeper than usual.

The astragalus presented several important deviations both in position and form, precisely similar to those described in the foetal specimen (See fig. C). It had the appearance of having

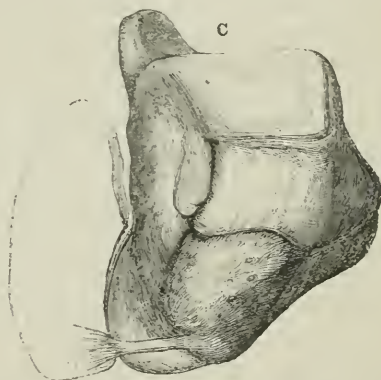


FIG. C.—Represents the adult astragalus, and its close resemblance to the foetal specimen, Fig. B, 1. The navicular bone, drawn in outline, shows its lateral position with respect to the axis of the astragalus, from the malformed condition of the head of that bone.

been partially dislocated forwards by the elevated position of the tuberosity of the os calcis. Its superior articular surface extended quite to the posterior border which terminated in a thin, sharp edge, instead of being obtusely rounded, and there was no trace of the groove for the flexor pollicis tendon; but little more than the posterior half of this elongated superior articular surface entered into the composition of the ankle-joint, the anterior portion being exposed upon the dorsum of the foot. The anterior

half of the bone was imperfectly developed, and the articular surface on the head of the bone had an antero-lateral aspect; the anterior portion of this surface was still covered with articular cartilage, though it could never have been in contact with the navicular bone. This would have been of the most important service in facilitating the production of the straight position of the foot, had the cure been attempted, even at a late period. The lateral articular surfaces were imperfect, more particularly the internal, which was very small, and placed close to the thin posterior edge of the bone; articular cartilage was not traceable in the normal position of this facet. The external articular surface was tolerably well formed, and covered more or less perfectly with cartilage, though only a small portion of its posterior part had ever articulated with the fibula, which was in contact with the outer surface of the astragalus behind this facet, and also with the adjacent portion of the os calcis. The specimen having been dried, it was impossible to ascertain the condition of the portions of articular cartilage developed on those parts of the superior, external, and anterior facets, which had never entered into the composition of the corresponding joints; the cartilage on the anterior portion of the head of the astragalus had a smooth surface, but that on the exposed anterior portion of the superior surface had an irregular or mammillated appearance.

The navicular bone was displaced inwards so far as to bring its tuberosity directly under the internal malleolus, which rested upon it, and both bones presented a flattened articular facet. The posterior surface of this bone was also altered in form by attrition in its outer half, which was displaced beyond the articular surface of the head of the astragalus.

The cuboid bone was partially displaced inwards from its articulation with the os calcis, but not sufficiently so to maintain its connexion with the navicular bone in its extremely inverted position; a full-sized quill might be passed into the space between these bones. The deviations in form of the cuboid bone consisted in its being arched in the direction of the curve of the foot, and its anterior articular surface being much attenuated, thin from above downwards, and rounded at its edges.

The internal malleolus of the tibia was much shorter than na-

tural, and presented inferiorly a flattened surface with an articular facet which articulated with the navicular bone. The groove for the tibialis posticus and flexor longus tendons was much deeper than natural, and had an antero-posterior, instead of a posterior position ; it passed obliquely forwards, cutting off, as it were, the posterior inferior angle of the bone. As in the foetal specimen, these tendons had evidently been placed rather on, than behind the malleolus, and had formed for themselves a groove whilst in this position.

With the exception of the deepened grooves described, the markings of the tarsal bones were generally very imperfect. The transverse arch of the foot was much increased by the folding inwards of the fifth and fourth metatarsal bones, the fifth being directly under the fourth, and the fourth partially under the third, so that the fifth metatarsal bone was approximated to the first. This condition contrasted remarkably with the foetal feet in which no such malposition existed, and had evidently resulted from the weight of the body having been for many years transmitted directly to the outer side of the foot.

On reviewing the anatomical peculiarities of this deformity in the specimens exhibited, it appeared certain that the condition of the muscles above described, *viz.*, the very imperfectly developed condition of the extensor longus digitorum, which in reference to its function might be said to be absent ; and the fully developed state of the tibialis anticus and posticus ; together with the hypertrophied condition of the inner half of the gastrocnemius, were amply sufficient to account for the extended and inverted position of the bones in the foetal specimen. Although it be possible that the theory of the production of congenital club-foot at present entertained by some of the highest authorities on the subject, *viz.*, that the deformity is produced by external mechanical causes, especially by position in utero, might apply to this case ; the imperfectly developed state of the extensor muscle offering no obstacle to, but rather facilitating, the operation of a mechanical cause, yet Mr. Adams considered that the condition of the muscles viewed collectively, might fairly be adduced as an argument against the mechanical origin of the deformity in this case, in as far as the condition of the muscles is in itself a sufficient

cause of the malposition of the bones. The cause, however, of the imperfectly developed condition of the extensor longus digitorum still remains to be explained. The coexistence of a spinal affection might be supposed to point to some condition of this nervous centre as the primary cause, if so, the nature of this condition and its *modus operandi* in producing the muscular phenomena have yet to be discovered. A local cause within the muscle itself, primarily affecting the nerves or muscular tissue, may be surmised, but remains to be demonstrated. It appears certain that the condition of this muscle, as above described, cannot rationally be attributed simply to the influence of a long retained position, for if this was the cause, it should be found as a constant appearance in cases of severe congenital talipes varus, examined soon after birth, in which there is reason for believing, from the condition of the bones, that the deformity had existed for several months; but this is not the case according to Mr. Adams' dissections, the muscle being found fully developed in several instances in which the astragalus presented the same deviations of form as described in the specimen exhibited, and which had, therefore, probably existed during a similar period. The frequency of the existence of this condition of the extensor muscle; the possibility of its removal by the development of muscular fibres after free motion of the ankle-joint had been obtained by division of the contracted tendons; and its influence in retarding, or interfering with the perfect cure of the cases in which it exists, by preventing the bones being retained in their normal position, have yet to be ascertained. Its existence may probably be diagnosed, when complete, by the total absence of the power of extending the toes, as in paralytic cases; and when partial, by a deficiency in this power to a corresponding extent.

The abnormal condition of the bones, in respect of their position and form in both the cases exhibited, is of great interest; the immediate cause of the malposition of the bones has been ascribed in the foetal specimen, with a fair share of probability, to the condition of the muscles, but the cause of the muscular condition rests in obscurity. A careful examination of the malformed condition of the bones, affords reason for believing such deviations in form as have been described, not to depend

upon any defective developmental power in the bones, these being the result, rather than the cause, of the deformity ; the malformed condition of the astragalus, for instance, being determined by the previously existing malposition of the bones with which it articulates.

The existence of cartilage on those portions of the articular surfaces of the astragalus which had either been extruded from, or had probably never entered into the composition of, the ankle-joint, and the articulation between the astragalus and navicular bone, evinced the tendency of the bone to develop itself in accordance with its normal typical form, and proved the possibility of the functions of the joints being restored to a very considerable extent, should the normal relative position of the bones be obtained by curative means. In the event of this being accomplished at an early period, it is also fair to infer, from the conditions above observed, that the bones during the subsequent period of their growth and ossification would assume their natural form, and that the functions of the joints would be perfect, so far as the bones and their articular surfaces were concerned. On the other hand, there can be little doubt that the difficulty of restoring the functions of the joints, so far as the bones are concerned, would increase in direct proportion to the extent to which ossification had been allowed to proceed in the deformed position. In the adult specimen exhibited, the functions of the joints could not have been perfectly restored, though great improvement might have been effected.

Mr. W. ADAMS, 3rd of February, 1852.

11.—*Case of curious Deformity of the Lower Extremity from Arrest of Development—Deformity of the Upper Extremity also.*

— O., aged six, a boy who was born with the following deformity, presented himself at the Orthopædic Hospital, Bloomsbury Square, on the 4th of February, 1852. The right lower extremity was in a state of atrophy, the foot extending only about two inches below the patella of the opposite leg. The knee-joint of the deformed limb being influenced by the ham-string muscles, was incapable of complete extension. The leg was flattened in shape,

rotated, and slightly retracted upon the condyles of the femur. The foot (if so it might be called), was articulated to the inner side of

Fig A



FIG. A represents the shape of the deformity, its relative size to the other leg, and the direction in which it was held when the boy stood in the erect position.

the leg instead of to the extremity, and the plantar surface looked upwards and inwards. The bone to which it was articulated was the fibula, apparently, from the shape of its termination resembling the malleolus externus; there was distinct but limited motion between the foot and this bone. The shape of the foot was

long and narrow, consisting of a broad flat heel, and a long narrow portion representing the tarsus and metatarsus, terminating in only one toe. There was a small fold of skin and fat at the point of junction of the foot and leg, puckered up into a small tumor about the size of a large pea. (See Fig. A.)

The right arm was also deformed and atrophied, though not to the same extent as the leg, there being less disproportion between the length of the two sides; there was, apparently, only one bone in the fore-arm, and this recognised as the ulna, from the presence of an olecranon process at the elbow-joint. The hand consisted of three fingers only, well developed and connected with three corresponding metacarpal bones; the number of carpal bones could not be ascertained. The wrist-joint, like the ankle, was situated laterally, and allowed the hand to be brought upwards and inwards in contact with the fore-arm, the angle formed by the two enabling the child to grasp and to hold things with considerable firmness.

The point for consideration in the treatment was, could the child be benefited at all? and, if so, to what amount? With regard to the hand, it was at once decided to leave it alone, for in its present condition it was useful; whilst, if brought into the straight position (which, no doubt, it might be), it would be useless, owing to there being no thumb. With regard to the leg, the question arose simply as to whether the child could walk with a wooden leg as well in the present condition of the leg and foot, as if part or the whole of it were removed. The foot itself could be made of no use in affording any support; for the nature of its formation and articulation prevented any chance of gaining anything like the formation of an ankle-joint. The next point to be decided was, if the foot were removed, would the long bone of the leg be of any use, either by its own extremity or by being doubled up upon the thigh, in forming a good stump to fit into a wooden leg? the latter might be, but the former certainly could not. It was finally decided to amputate the leg below the knee, leaving a sufficient portion to form a broad surface in conjunction with the end of the femur, to make a good stump to rest upon a wooden leg, and an operation was performed with this object in view.

On dissecting the foot, and leg after removal, the following were the appearances (see Fig. *B*):—The leg consisted of one bone only, and this, no doubt, was the fibula from its broad malleolar extremity, and from its being situated quite on the outer side of the limb. The bone was surrounded by a good deal of well developed muscular fibre, though it was difficult to individualise

Fig B

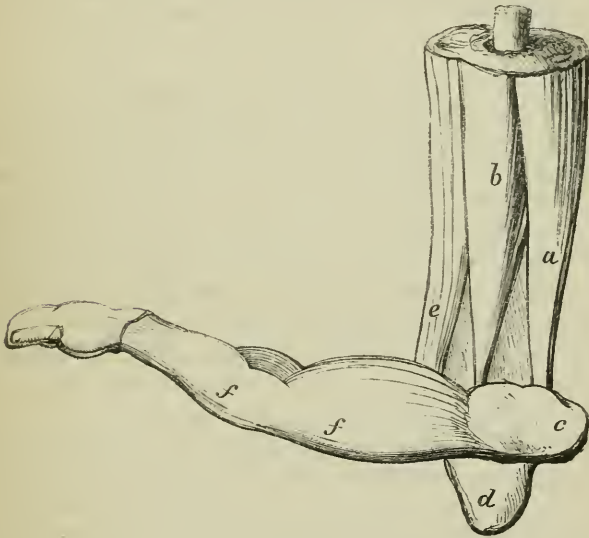


FIG. *B* shows the muscles; the only two definitely formed being the gastrocnemius, *a*, and the posterior tibial, *b*, both of which were inserted into the os calcis; this bone itself being attached to the fibula above the malleolus, *d*. The muscles, *f*, of the foot surrounded the toe, with no definite mark of separation. *e*, marks other muscles of the leg inserted into the os calcis and metatarsal bone.

particular muscles, with the exception of the gastrocnemius, which bore its natural form and relative position. The foot was articulated by means of the os calcis (which was of its natural shape posteriorly, though longer than natural at its anterior part), to the inner surface of the fibula by means of a distinct cartilaginous covering and synovial membrane. The only other bones of

the tarsus present were, a small bone, shaped something like the cuboid, articulated to the anterior surface of the long os calcis; a single metatarsal bone, and a toe consisting of ten phalanges, to which there went a single well developed extensor tendon on the part of the foot corresponding to the sole and instep, was thickly coated with muscular fibres, without any distinct origin or insertion. The muscles of the leg, with the exception of the gastrocnemius, which took its natural insertion to the os calcis, passed down to be attached to the inner edge of this bone, and to the metatarsal bone.

Mr. LONSDALE, *2nd of March, 1852.*

12.—*Three Specimens illustrative of the condition of the Muscles, Bones, &c., in different forms of Non-Congenital Club-Foot.*

The specimens consisted of two legs from the body of a man, aged twenty-five, affected with talipes equino-varus of the left foot, and talipes equinus of the right foot. Also, the left leg of a woman, aged about sixty, affected with talipes equino-varus. All were of the most severe form. The last specimen Mr. Adams was permitted to examine and exhibit to the Society, through the kindness of Mr. Partridge, who removed it from a subject in the dissecting-room of King's College. The history of the case could not be ascertained. The first two specimens were removed by Mr. Adams, from a subject in the dissecting-room of St. Thomas' Hospital. The only particulars that could be ascertained of this case were, that the man had been in the Strand Union Workhouse three years, that the feet were contracted when admitted, and that he walked with one crutch. He died from consumption.

Thus, some of the interest attaching to these cases is lost from the absence of the early history of the deformities; but as these affections can be diagnosed with almost absolute certainty, in respect of their origin, from the general appearance alone of the feet and extremities, the absence of history may be considered of less importance than it would at first appear.

The two cases of equino-varus, No. I. and II., in the tabular form annexed, were stated by Mr. Adams, previous to any microscopical examination of the muscles; No. I. to be of paralytic, and No. II. of spasmodic origin; corresponding differences in the

structural alterations of the muscles were, therefore, anticipated, and the results, as recorded in the table annexed, strongly favour the correctness of this diagnosis. The only difficulty was with respect to No. II ; and from the appearance of the limb, Mr. Lonsdale fully concurred with Mr. Adams, and entertained no doubt of this affection having been of spasmodic character.

The specimen described as Case I., presented the ordinary appearances of long standing talipes equino-varus, dependent originally upon paralysis of one or more of the extensor muscles, but especially of the extensor longus digitorum and of the peronei. The leg was extremely attenuated : the os calcis drawn upwards to its full extent, with considerable obliquity inwards ; the anterior half of the foot was inverted to full half the extent seen in a severe congenital case in the adult ; and the toes were drawn downwards by the flexor muscles, compressed, and misshapen. The muscles generally were very much smaller than in a well nourished leg, probably not much more than half the size, but a remarkable disproportion in bulk existed between the extensors and flexors. The extensor longus was reduced to a very thin layer of muscular fibres, having a remarkably coarse fasciculate appearance, caused by the fibres being separated from each other by abundant, and somewhat delicate, fibro-cellular membrane. All the muscles were of a very pale colour, and coated with a more or less perfect layer of deep yellow-coloured fat lying beneath the fascia, separating the muscles from each other, and dipping between their fasciculi. The bones presented the usual deviations in position observable in this deformity, viz. partial luxation of the astragalus forwards and downwards, produced by the almost vertical position of the os calcis, from contraction and permanent shortening of the gastrocnemius ; and also partial luxation of the navicular bone inwards, so that its internal and upper border closely approached the inner malleolus, the external half of the head of the astragalus being left exposed. This displacement of the navicular bone was due chiefly to the contracted and permanently shortened condition of the tibiales (anticus and posticus) muscles. The cuboid bone was also partially displaced inwards from its articulation with the os calcis, following, but not to a proportionate extent, the navicular bone. The articular cartilage

on the anterior third of the superior articular surface of the astragalus, and the outer half of the head of the astragalus, which were thus exposed on the dorsum of the foot, covered only by the elongated ligaments, were irregularly absorbed, and in most parts completely removed. The denuded bone in these situations was atrophied to an extreme degree; its shell, reduced to the thinness of tissue paper, yielded to the slightest pressure, and the cells of its cancellous tissue were enlarged and filled with oil, just as in long-standing scrofulous disease of the ankle and tarsal joints in young persons.

The specimen of talipes equino-varus described as Case II., presented the ordinary appearances of the spasmodic form of that affection of long standing, originally dependent upon a spasmodic condition of the muscles of the limb generally, in which the more powerful muscles gain the ascendancy, and by their condition of tonic spasm, and permanent shortening, produce the deformity. The limb was less bulky than natural, but did not present the appearance of attenuation described in No. I. The os calcis was drawn upwards, and the anterior half of the foot inverted to the same extent as in No. I., by the rigid shortening of the gastrocnemius and anterior and posterior tibial muscles; but the toes were drawn rigidly upwards, so that the first phalanx of each toe was at a right angle with its corresponding metatarsal bone, by the action of the long and short extensor muscles. A partial luxation upwards of the first phalanx was thus produced in each toe, the greater portion of the head of the corresponding metatarsal bone being exposed. The exposed articular cartilage of the first metatarsal bone was irregularly absorbed. The second and third phalanges of the four outer toes were drawn downwards, to a right angle with their corresponding first phalanges. The second phalanx of the great toe was not drawn downwards; but this toe was rotated inwards, so that its nail looked directly outwards, and its under surface was in contact with the outer margin of the second toe.

The muscles, though small as compared with those of a well developed leg, were generally of firm texture, slightly paler in colour than natural, and neither coated with layers of fat, nor exhibiting fat in their interstices as in No. I. There was no

obvious disproportion in bulk between the flexors and extensors. Some of the tendons were altered in their direction, more particularly that of the *tibialis anticus* and the *tendo Achillis*, the former crossing the end of the tibia above the usual point, and passing over the ankle-joint more to the inner side; the *tendo Achillis* deviated from its usual central position at the back of the leg, and passed downwards in a line very much nearer the inner border of the tibia, being placed over that bone, rather than between the tibia and fibula, and directly covering the posterior tibial artery. This tendon was placed almost as much to the inner side as it usually is in severe cases of congenital varus; the alteration in its position appeared to depend upon the oblique position of the *os calcis*, and its mode of insertion into that bone; the upper part of the tuberosity of the *os calcis* was brought near to the fibula, while the lower half of the tuberosity, into which the tendon is inserted, was turned inwards to a proportionate extent towards the inner malleolus, so that the point of its insertion being thus carried towards the inner side of the leg, the position and direction of the tendon were necessarily altered.

The specimen of *talipes equinus* described as Case III., was a well marked example of that deformity, but the general appearance of the limb did not clearly indicate the cause of the deformity as in the two previous cases—it was less wasted than in an old case depending upon complete paralysis of the extensor muscles, and more atrophied than in a spasmodic case, without the prominence and tension of the tendons, and rigidly extended condition of the toes in this form. It is probable that the contraction of the *gastrocnemius* in this case was the result of slight loss of power in the extensor muscles, not amounting to paralysis, a very frequent condition, and one from which complete recovery appears to take place. Numerous patients afflicted with this deformity present themselves at the Orthopædic Hospital, generally some years after the commencement of the deformity, without any indication of existing paralysis, and after division of the contracted tendons, the extensor muscles have sufficient power to retain the foot in its normal position, though the early history of the case—the child dragging its foot after it, the coldness and

wasting of the leg, the loss of power of extending the toes, and frequently, though by no means constantly, the suddenness of the seizure—clearly point to a partially paralytic origin. The comparatively healthy condition of all the muscles, especially contrasts with the condition of the muscles in the opposite leg, in Case I., and confirms the opinion with respect to the general nature of the deformity. This foot had evidently been a useful member to the individual, who used a crutch to compensate for the paralytic and deformed condition of the opposite leg.

Mr. Quekett very kindly undertook to examine the condition of all the muscles of the leg in these three cases of non-congenital club-foot, and his description of the microscopical appearances is annexed in a tabular form. The facts are not sufficiently numerous to warrant any general inferences in respect of the connexion between these different structural changes, and the physiological conditions by which they are determined; but being the result of careful observation, they may be useful as furnishing a portion of the data necessary for this important inquiry. The illustrative figures (plate XII.) were drawn under Mr. Quekett's superintendence by Mr. Leonard.

TABLE

SHOWING THE CONDITION OF THE MUSCLES OF THE LEG IN THREE CASES OF NON-CONGENITAL CLUB-FOOT, DESCRIBED AS NO. 12.

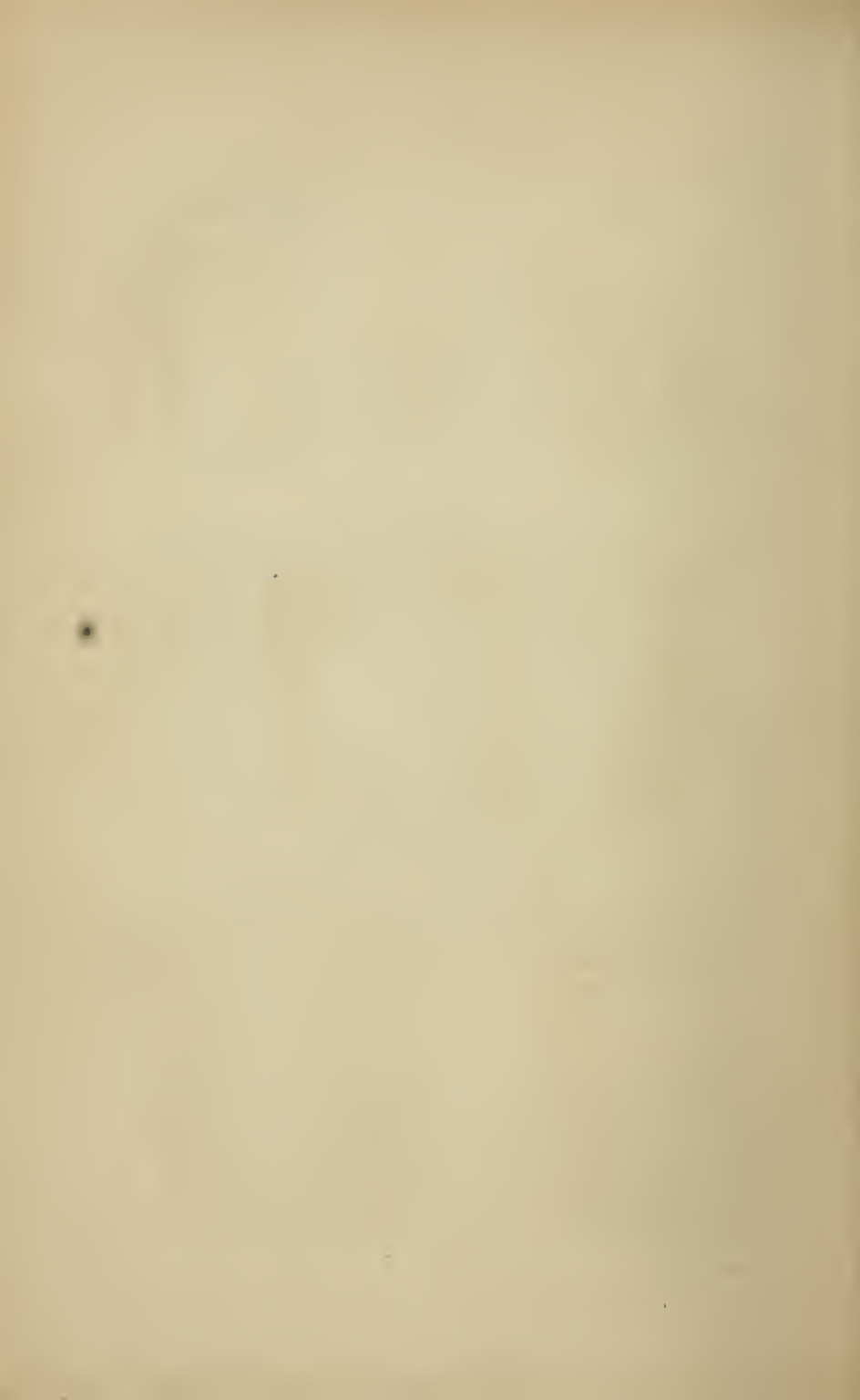
Muscles.	CASE I. Paralytic equino-varus.	CASE II. Spasmodic equino-varus.	CASE III. Talipes equinus without paralysis or spasmodic affection.
Extensor longus digito- rum.	The mass examined consisted almost entirely of areolar tissue. Degeneration of muscular tissue complete. No muscular fibres in process of degeneration. The only trace of muscle in a large (microscopic) piece examined, were some fibres about $\frac{1}{1800}$ th of an inch in diameter, with striæ	Muscular fibres abundant, of the natural size, and healthy. Fibrous tissue not in excess. No adipose tissue. This muscle apparently in a healthy condition. Two healthy fibres are shown in Plate XII., fig. 1.	Muscular fibres abundant, but generally above the average size of healthy fibres. Transverse striæ distinct. The larger muscular fibres were peculiar; the parts forming the transverse striæ could be entirely separated from the sarcolemma in a spiral form, and each stria, when

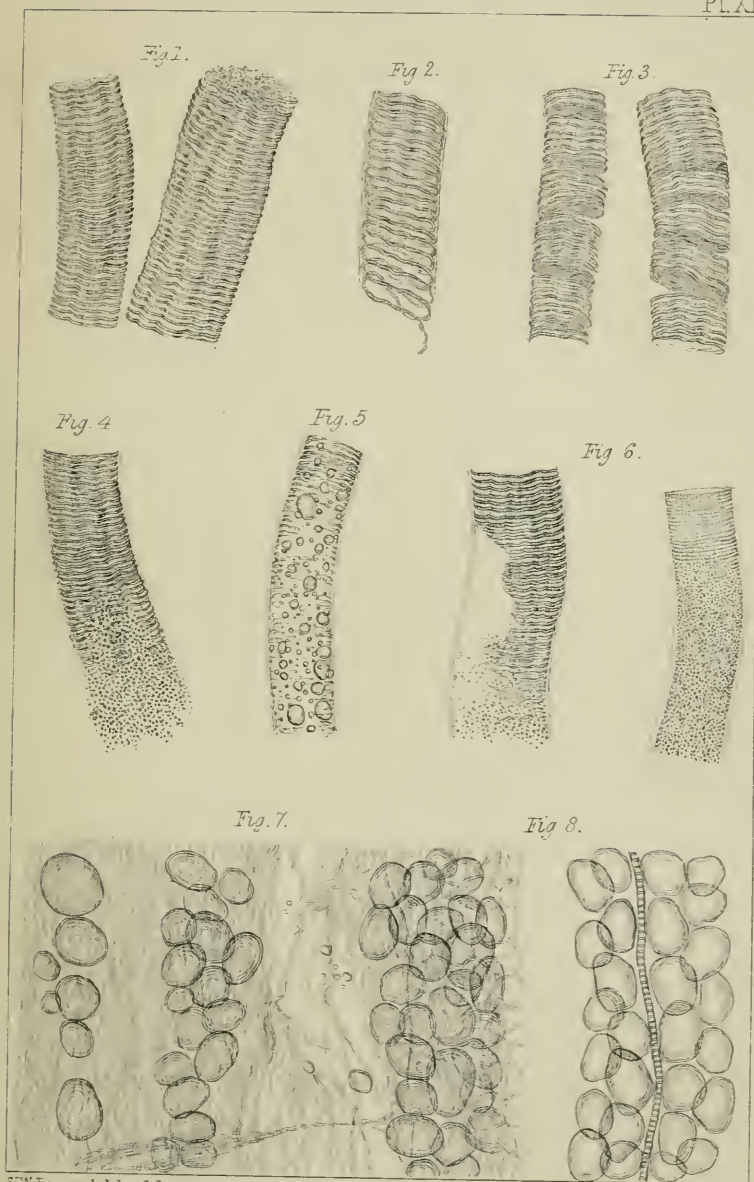
Muscles.	CASE I. Paralytic equino-varus.	CASE II. Spasmodic equino-varus.	CASE III. Talipes equinus without paralysis or spasmodic affection.
Extensor longus digito- rum.	well developed. Mr. Quekett considered that these fibres were either of new development, or else fibres that had never attained their normal size. Adipose tissue occurring as a double row of fat-cells in the neighbourhood of the small muscular fibres. See Plate XII., fig. 8.		highly magnified, exhibited a beaded structure like the ordinary fibrillæ. Areolar tissue not in excess. Masses of adipose tissue between some of the bundles of fibres. See Plate XII., fig. 2.
Tibialis anticus.	Healthy muscular fibres abundant, and of normal size; others of equal size in the first stage of degeneration (see Mr. Quekett's lectures on Histology, p. 196). No excess of fibrous tissue, nor any adipose tissue in the part examined. See Plate XII., fig. 4.	Muscular fibres generally smaller than usual, and abundant; transverse striæ well marked. There were some muscular fibres rather above the natural size, in the first stage of degeneration. Fibrous tissue in excess. Adipose tissue occurring in masses amongst some of the fibres.	Muscular fibres abundant, but smaller than usual; otherwise healthy: transverse striæ well marked. A small amount of fibrous and adipose tissue, the latter occurring chiefly in one mass in the portion examined.
Extensor proprius pollicis.	Healthy muscular fibres abundant, and of variable diameter, generally below the normal size. Two minute fibres were seen similar to those in the extensor longus digitorum. Areolar tissue abundant. No adipose tissue.	Muscular fibres abundant and healthy. Only a small amount of fibrous and adipose tissue.	Muscular fibres abundant and healthy, transverse striæ exceedingly well marked. A small amount of fibrous tissue between some of the fibres, but no trace of adipose tissue.
Gastrocne- mius.	No trace of muscular tissue in the parts examined. A large amount of fibrous tissue between rows of adipose cells. Adipose tissue abundant, and the cells arranged in parallel rows. Plate XII., fig. 7.	Muscular fibres abundant, but of much smaller size than usual, and the striæ indistinct in most parts; in some situations the bundles of fibres were very evident, but the striæ scarcely traceable, and the contents of the sarcolemma con-	Muscular fibres of variable size, exhibiting their striæ very well. The fibres were all so firmly imbedded in fibrous tissue that they could not be separated without being more or less torn transversely. In a second portion little

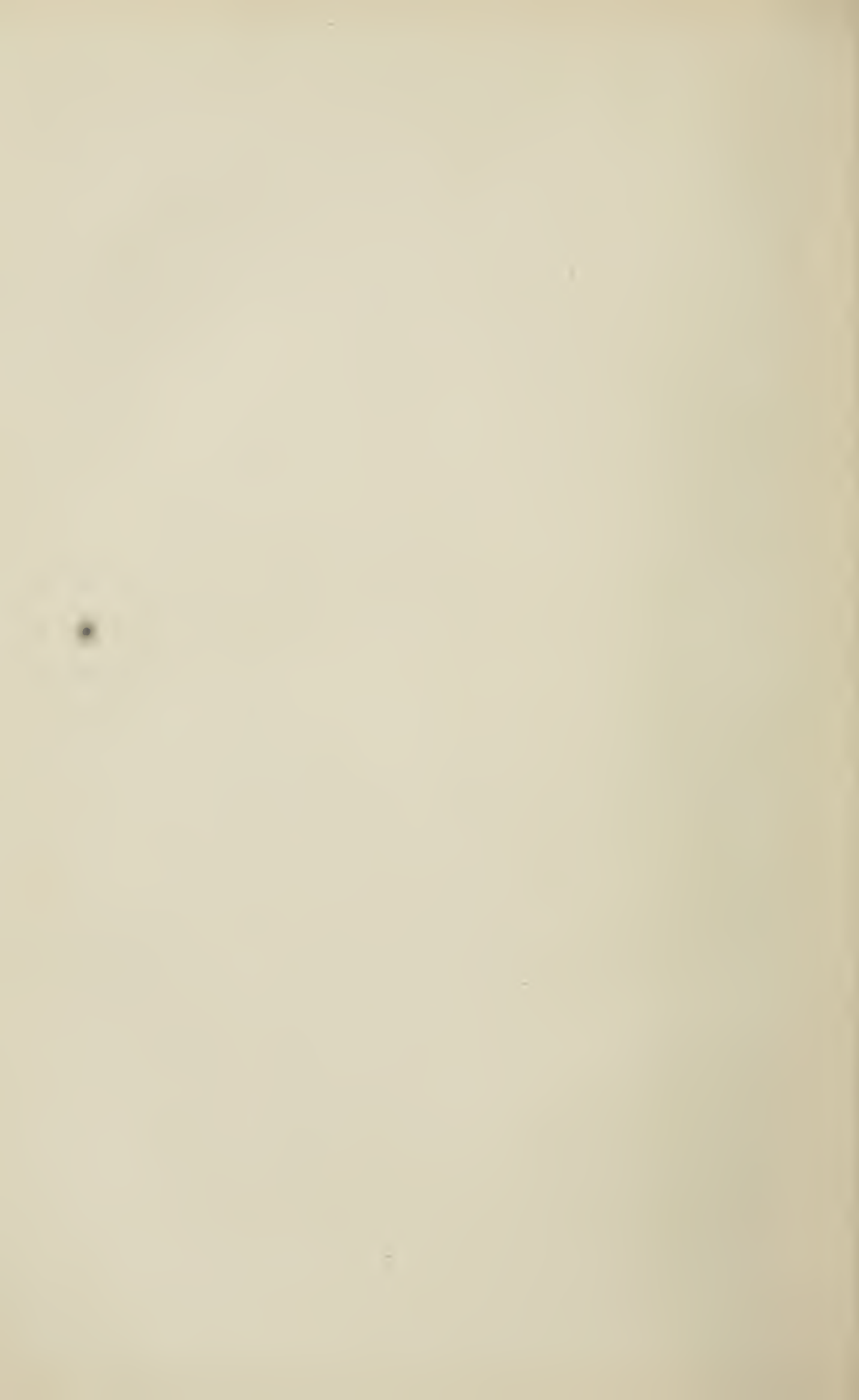
Muscles.	CASE I. Paralytic equino-varus.	CASE II. Spasmodic equino-varus.	CASE III. Talipes equinus without paralysis or spasmodic affection.
Gastrocnemius.		fused and granular. Fibrous tissue abundant. Small masses of adipose tissue existed between some of the bundles of muscular fibres.	manipulated, the fibres were still seen to be broken into short lengths. Some of the largest fibres were in the first stage of fatty degeneration; in others the particles of myoline were replaced by minute globules of oil. There was a considerable amount of adipose tissue. See Plate XII., fig. 3.
Soleus.	Presented the same appearances as the gastrocnemius, with the addition, in the part examined, of one bundle of minute muscular fibres.	Muscular fibres abundant, of variable size, in all stages of degeneration as in the gastrocnemius, but more advanced. Many exhibited nothing but the sarcolemma containing the remains of the particles of myoline and minute globules of oil, the other parts of the fibres being transparent and tolerably well defined. Plate XII., figs. 5, 6.	Muscular fibres few in number; firmly imbedded in fibrous tissue, and in the first stage of degeneration. Adipose tissue distributed generally throughout the specimen. This muscle was in a more advanced state of degeneration than the gastrocnemius.
Tibialis posticus.	Fibres abundant and healthy—only in one part was degeneration evident. Adipose tissue abundant, and in some parts the cells arranged in rows between the healthy muscular fibres.	The mass examined consisted almost entirely of fibrous and adipose tissues, without any traceable muscular fibres.	Muscular fibres abundant and healthy—only in one place was any degeneration evident. Adipose tissue occurring in considerable abundance between some of the bundles of fibres.
Flexor longus digitorum.	Muscular healthy fibres abundant, but variable in size, some being less than one-fourth the natural size; these appeared to be of new formation. Fibrous tissue more abundant than natu-	Muscular fibres abundant, of small size, but the transverse striæ well marked. Fibrous and adipose tissues abundant.	Muscular fibres abundant, of the usual size, and exhibiting their transverse striæ very well. There were some fibres of much larger size than usual in the first stage of degeneration. No

Muscles.	CASE I. Paralytic equino-varus.	CASE II. Spasmodic equino-varus.	CASE III. Talipes equinus without paralysis or spasmodic affection.
Flexor longus digitorum.	ral. Adipose tissue found only in the neighbourhood of the blood-vessels.		excess of areolar or fibrous tissue.
Flexor longus pollicis.	No trace of muscular fibre; the mass examined consisted of alternate rows of adipose cells and fibrous tissue.	Muscular fibres abundant, but exceedingly small, and degenerated like those of the gastrocnemius; very few of them exhibited transverse striæ. Fibrous and adipose tissues abundant.	Muscular fibres abundant, but rather smaller than usual; transverse striæ well seen. A small amount both of fibrous and adipose tissues.
Peroneus longus.	Muscular fibres few in number, but of the usual size, and the transverse striæ distinct. The part examined consisted principally of fibrous tissue. No adipose tissue.	Muscular fibres abundant, but smaller than usual; transverse striæ distinct. Adipose and fibrous tissues present in small quantities.	Muscular fibres abundant, but of large size, and generally in the first stage of degeneration. Considerable amount of fibrous tissue, but no adipose cells.
Peroneus brevis.	No trace of muscular fibres, and very little of adipose tissue, the portion examined being almost wholly composed of fibrous tissue.	Muscular fibres abundant, smaller than usual. By far the greater number of them in the first stage of degeneration. Fibrous tissue abundant, and a small amount of adipose tissue.	Muscular fibres abundant and healthy, with the exception of some irregularity in size. No adipose or fibrous tissue.

Mr. W. ADAMS, 18th of May, 1852.







I N D E X.

- Abdominal aneurism, bursting through the diaphragm into the chest, 307.
- „ parietes, portion of, from a woman tapped for ovarian dropsy, 141.
- „ viscera, colloid disease of, 319; report on, 323.
- Abscess of the cerebellum, with polypus of the ear, and caries of the petrous portion of the temporal bone, 179.
- „ double psoas, with scrofulous necrosis of the lumbar vertebræ, 150.
- „ of the left middle, and posterior lobes of the brain, connected with rheumatic symptoms, 236.
- „ of the left cerebral hemisphere, with general softening of the brain, and caries of the temporal bone, 241.
- „ of the liver in a child, 115.
- „ „ acute, consecutive to enteritis, 349.
- „ „ hydatid, opening into the right pleural cavity, 341.
- „ „ opening into the lung, consecutive to dysentery, 339.
- „ „ followed by suppurative peritonitis, intestinal perforation, &c., 346.
- Acephalocyst in the liver, echinococcus from, 352.
- Acephalocysts in a large cyst in the pelvis, 375.
- Acetabulum and head of the femur, disease of, 170.
- Adventitious membrane, dividing the cavity of the tunica vaginalis, 360.
- Alveolar process, exfoliation of; necrosis of the lower jaw, 423.
- Amputation below the knee; congenital stump, 434.
- „ for necrosis of the tibia, 433.
- Anatomy, morbid, of the recurrent nerve, compressed by an aneurism of the aorta, 304.
- Anchylosis, osseous, of the hip-joint, 430.
- Aneurism of the aorta, 304.
- „ „ bursting into the pericardium, 37.
- „ of the abdominal aorta, bursting through the diaphragm into the chest, 307.
- „ „ with fatty degeneration of the heart, 310.
- „ of the descending aorta, bursting into the left bronchus, 312.
- „ small aortic, opening by minute orifices, 307.
- „ of the anterior cerebral artery, 46; report on, 47.
- „ of the left ventricle of the heart, 30.
- „ „ and mitral valve, 285.
- „ of the mitral valve, 78.
- „ in the ventricular septum, 287.
- Aneurismal tumors of the lower extremity, 88.
- Anterior cerebral artery, aneurism of, 46; report on, 47.
- Anus, artificial, in the left loin, on account of diseased rectum, 371.
- Aorta, abdominal, aneurism of, with fatty degeneration of the heart, 310.

- Aorta, aneurism of; morbid anatomy of the recurrent nerve compressed by, 304.
- “ “ bursting into the pericardium, 87.
- “ coronary arteries, and mitral valve, ossification of, 271.
- “ descending, aneurism of, bursting into the left bronchus, 312.
- “ dilatation of arch of, 314.
- “ and pulmonary artery, transposition of, 63.
- Aortic aneurism, opening by minute orifices, 307.
- “ orifice, obstructive and regurgitant disease of, 288.
- “ valve, dilatation of one of the segments of, 296.
- “ valves, diseased, 297.
- “ “ with general hypertrophy of the heart, 299.
- “ “ and malformed, 289; report on, 291.
- “ “ injury of, from violent muscular effort, 71.
- “ “ malformation of, 296.
- “ “ obstructive disease of, from malformation, 287.
- “ “ obstructive and regurgitant disease of, 75, 77.
- Appendix vermiformis, adhesion of, to the ileum, causing internal strangulation, 101.
- Arachnoid membrane, new vessels on the surface of, after an accident, 34.
- Arch of the aorta, dilatation of, 314.
- “ right anterior, of the fauces, ulcerated cancerous tumor of, 315.
- Areola of the breast, tumor attached by a pedicle to, 186.
- Arrest of phthisis in the third stage, 50.
- “ of development, causing a curious deformity of the upper and lower extremities, 464.
- Arteries, minute, of the cerebrum, calcification of, 239.
- Arthritis, chronic rheumatic, enlargement of the articular extremities of bones in, 156.
- “ “ of five joints in the same person, 155.
- “ “ of the knee-joint, 151.
- “ “ of the left hip-joint, 152.
- Arthritis, chronic rheumatic, preparations illustrating, 153.
- Articular extremities of bones, enlargement of, in chronic rheumatic arthritis, 156.
- Artificial anus in the left loin, on account of diseased rectum, 371.
- Auditory meatus, external, affections of, causing disease in the cerebral cavity, 37.
- “ “ molluscous tumors of, 177; effects of, 177.
- “ nerve, neuroma of, 49.
- Auriculo-ventricular aperture, the left, regurgitation through, from dilatation of the orifice of, 286.
- Axis, fracture of the spinous process of, 143.
- Bladder, and ureter, calculi in, 390.
- “ diseased, with calculi impacted in the ureter, 117.
- “ fungoid disease of, 125.
- “ of a man who had twice undergone lithotrity, 118.
- “ polyposus excrescences of, 127.
- “ portions of calculi impacted in, after lithotrity, 119.
- “ prostate and kidneys, disease of, 126.
- “ sacculated, 128.
- “ “ with enlarged prostate gland, 124.
- Blighted ovum, 137.
- Blood, excess of white corpuscles of, enlarged spleen, 338.
- “ spontaneous coagulation of, in the carotids, causing softening of the brain, 40.
- Bone and teeth from an ovarian cyst, 133.
- Bones, enlargement of the articular extremities of, in chronic rheumatic arthritis, 156.
- “ portions of, found in a congenital tumor, 445.
- Brachial artery, rupture of, ten days after compound dislocation of the elbow-joint, 302.
- Brain, abscess of the left middle and posterior lobes, connected with rheumatic symptoms, 236.
- “ cholesteatomatous tumor of the, 44.
- “ disease of the base of, extending from the tympanum through the labyrinth, 438.

- Brain, general softening of, with abscess in the left hemisphere, and caries of the temporal bone, 241.
- „ injury of, with fracture of the skull, complicated with diseased kidney, 230.
- „ injury to, with fracture of the temporal bone, hæmorrhage, and serous discharge from the ear, 222.
- „ red and white softening of the right hemisphere of, 242.
- „ scrofulous tubercles of, with tuberculous mass projecting into both auricles of the heart, 34.
- „ softening of, caused by spontaneous coagulation of blood in the carotids, 40.
- „ softening of, connected with fatty degeneration and rupture of the heart, 264.
- „ skull and dura mater, encephaloid tumors connected with, 173.
- „ tumor in the posterior lobe of the right hemisphere of, 246; report on, 247.
- Breast, rapid destruction of, by cancer, 444.
- „ tumor of, 191.
- „ „ attached by a pedicle to the areola of, 186.
- Bronchial and other glands, cancer of, 251.
- Bronchus, left, aneurism of the descending aorta bursting into, 312.
- Burn, secondary inflammation, and disease of the elbow-joint following, 175.
- Calcareous material, crystalline lens converted into, 183.
- „ matter in the cavity of the vestibule, 436.
- Calcification of the minute arteries of the cerebrum, 239.
- Calculi impacted in the ureter, with diseased bladder, 117.
- „ portions of, impacted in the bladder, after lithotomy, 119.
- „ cystic oxide, 383.
- „ in the bladder and ureter, 390.
- Calculus particles from the choroid plexus, 45.
- Canal, vertebral, deposit of fat in the cervical portion of, 248.
- Cancer of the cœcum, 368.
- „ of the lungs, pleura, pericardium. bronchial and other glands, 251.
- „ medullary, of the radius and carpus, 170.
- „ of the omentum, mesentery, pleura, &c., 101.
- „ of the ovaries, stomach, liver, and peritoneum, 409.
- „ of the posterior mediastinum, 253.
- „ with rapid destruction of the breast and adjacent parts, 444.
- Cancerous growth, larynx surrounded by, 56.
- „ tumor, ulcerated, of the right anterior arch of the fauces, 315.
- „ ulceration of the face, 192.
- Carcinoma of the lung, 55.
- Caries of the petrous portion of the temporal bone, with polypus of the ear, and abscess of the cerebellum, 179.
- „ of the temporal bone, with general softening and abscess of the brain, 241.
- Carotids, spontaneous coagulation of the blood in, causing softening of the brain, 40.
- Carpus and radius, medullary cancer of, 170.
- Cataract, depression of, eye removed after death, twenty years after operation for, 182.
- Cerebellum, abscess of, with polypus of the ear, and caries of the petrous portion, 179.
- „ fatty degeneration of the minute vessels of, and of the heart, with aneurism of the abdominal aorta, 310.
- „ tumor of, 43.
- Cerebral artery, anterior, aneurism of, 46; report on, 47.
- „ cavity, disease in, originating in affections of the external auditory meatus, 37.
- Cerebrum, calcification of the minute arteries of, 239.
- Cervical portion of the vertebral canal, deposit of fat in, 248.
- Cervix uteri, fibrous tumor of, 138.
- Cholera, crystals formed on the surface of a body, previously to death by, 441.

- Cholesteatomatous and cystic tumor of the ovary, 401.
 " tumor of the brain, 44.
 Cholesterine in the mastoid cells, 441.
 Choroid plexus, calculous particles from, 45.
 Club foot, non-congenital, specimens illustrative of the condition of the muscles, bones, &c., in, 468.
 Cæcum, cancer of, 368.
 " and ileum, chronic inflammation and thickening of, &c., from gall-stones, 365.
 Colloid disease of the abdominal viscera, 319; report on, 323.
 Colon, ascending, stricture of; intestinal obstruction; operation for inguinal hernia, 357.
 " enormous dilatation and hypertrophy of, especially of the sigmoid portion, 106.
 " laceration of the sigmoid flexure of, 93.
 " ulceration of, 329.
 Compression at birth, causing the diamond-shaped head, 225.
 Congenital hernia, double, the cavity of the left tunica vaginalis being divided by an adventitious membrane, 360.
 " malformation of the external ear, and meatus, 435.
 " stump; amputation below the knee, 434.
 " tumor, portions of bones found in, 445.
 Contraction, extreme, of the tricuspid and mitral apertures, from old endocarditis, 283.
 Coronary arteries, ossification of, 271.
 Corpus striatum, softening of, 246.
 Corpuscles, white, of the blood, excess of; enlarged spleen, 338.
 Cranial bones, morbid growth of, causing great enlargement of the head, 415; report on, 416.
 Cranium, femur, and os calcis, strumous disease of, resembling malignant growths, 145.
 Crimson or hæmatoid crystals, with calcification of the minute arteries of the cerebrum, 239.
 Crystals found on the surface of the body, previously to death by cholera, 441.
 " crimson or hæmatoid, 239.
 Crystalline lens converted into a calcareous material, 183.
 Cutaneous fatty tumor, 454.
 Cyst, remarkable, in the omentum, 374.
 " large, in the pelvis, containing great numbers of acephalocysts, 375.
 " ovarian, piece of bone and teeth from, 133.
 Cysts, serous, in the kidney, 377; report on, 379.
 " in the kidneys, 381; report on, 381.
 " in a kidney, gelatinous-looking matter from, 384.
 Cystic and cholesteatomatous tumor of the ovary, 401.
 " kidney, 131.
 " oxide calculi, 283.
 " ovary, with malignant disease of liver and peritoneum, 404.
 Deaf and dumb child, examination of the ears of; otoconia in one of the membranous semicircular canals, 436.
 Deformity, curious, of the lower and upper extremities, from arrest of development, 464.
 Degeneration of the minute vessels of the brain, 246.
 " fatty, of the heart, 262, 269.
 " " " connected with softening of the brain, and causing rupture of the heart, 264.
 " " " ossification of the aorta, coronary arteries, and mitral valve, 271; report on, 272.
 " " " with aneurism of the abdominal aorta, 310.
 " " of the uterus, after parturition, 395; report on, 395.
 " fibrous, and deposits in the substance of the heart, 273; report on, 275.
 " " of the heart, connected with acute rheumatism, 276; report on, 279.
 Deposit, unorganised, in the spleen, 337.
 " doubtful morbid, in the liver, 353; report on, 354.
 " fibrinous, in the substance of the liver and spleen, 355.

- Deposit, indistinct, morbid, in the kidney, 384 ; report on, 385.
- Depression of cataract, eye removed after death, twenty years after operation for, 182.
- Dermoid and epidermoid laminae of the membrana tympani, hypertrophy of, 178.
- Development, arrest of, 464.
- Diamond-shaped head from compression at birth, 225.
- Diaphragm, abdominal aneurism bursting through, into the chest, 307.
- Dilatation, enormous, and hypertrophy of the colon, &c., 106.
- " commencing, of one of the segments of the aortic valve, 296.
- " of the arch of the aorta, 314.
- Disease of the eye, following injury, 181.
- " of the lower jaw, 425.
- Diseased aortic valves, 297.
- " with general hypertrophy of the heart, 299.
- " and malformed aortic valves, 289 ; report on, 291.
- " knee-joint, 176.
- " larynx and trachea, seven days after tracheotomy, 249.
- " placenta, 142.
- Dislocation, compound, of the elbow-joint, rupture of the brachial artery ten days after, 302.
- Diverticulum from the lower portion of the ileum, 366.
- Duodenum and stomach, sections of two large masses of hair and string from, 327.
- Dura mater, fibrous tumor growing from the, near the cavernous sinus, 43.
- " brain and skull, encephaloid tumours connected with, 173.
- " and pelvic bones, encephaloid growths connected with, 226.
- Dysentery, abscess of the liver consecutive to, 339.
- " with extensive sloughing and ulceration of the large intestines, 363.
- Dysmenorrheal false membrane, 391.
- Ear, external, and meatus, congenital malformation of, 435.
- " polypus of, with caries of the petrous portion of the temporal, and abscess of the cerebellum, 179.
- Echinococcus from an acephalocyst in the liver, 352.
- Elbow-joint, disease of, and secondary inflammation following a burn, 175.
- " rupture of the brachial artery, ten days after compound dislocation of, 302.
- Empyema, diseased lungs, spleen, and kidneys after, 259.
- Encephaloid deposits, secondary, with malignant ulceration of the integuments of the right internal malleolus, 195.
- " growths, in connection with the dura mater, pelvic bones, &c., 226.
- " tumor in the anterior mediastinum, 254 ; report on, 258.
- " of the fore-arm, involving the deep flexor tendons, 448.
- " tumors connected with the skull, dura mater, and brain, 173.
- Enchondromatous tumor, ossifying, of the lungs, 58.
- Endocarditis, old, extreme contraction of the tricuspid and mitral apertures from, 283.
- Endocardium and pericardium, rupture of, 67.
- Enlarged spleen, examination of three specimens of, 233.
- Enlargement of the articular extremities of bones, in chronic rheumatic arthritis, 156.
- " of the prostate, 389.
- Enteritis, acute abscess of the liver consecutive to, 349.
- Epidermoid and dermoid laminae of the membrana tympani, hypertrophy of, 178.
- Epilepsy, hemiplegia, softening of a corpus striatum, degeneration of the minute vessels, 246.
- Epistaxis, enlarged spleen, &c., 333.
- Excision of the head of the femur, in diseased hip-joint, 429.
- Excrecences, polypous, of the bladder, 127.
- Exfoliation of the alveolar process; necrosis of the lower jaw, 423.
- Exostosis, large, from the parietal bone, 149.

- Extra-capsular fracture of the neck of the femur, complicated by fracture of the trochanter, 428.
- Extremities of an infant, gangrene of, 184.
- Extremity, lower, aneurismal tumors of, 88.
- " " and upper, curious deformity of, from arrest of development, 464.
- Eye, disease of, following an injury, 181.
- " fungus hæmatodes of, 183.
- " removed after death, twenty years after the operation for the depression of a cataract, 182.
- Face, extensive cancerous ulceration of, 192.
- Fallopian tube, uterus and peritoneum, deposit of tubercle in, 398; report on, 400.
- Fat, deposit of, in the cervical portion of the vertebral canal, 248.
- Fatty degeneration of the heart; rupture of the left ventricle, 262, 269.
- " " connected with softening of the brain, and causing rupture of the heart, 264.
- " " ossification of the aorta, coronary arteries, and mitral valve, 271; report on, 272.
- " " with aneurism of the abdominal aorta, &c., 310.
- " " of the uterus after parturition, 395; report on, 395.
- " and fibrous degeneration of the heart, 82.
- " cutaneous tumor, 454.
- Fauces, ulcerated cancerous tumor of the right anterior arch of, 315.
- Femoral hernia, strangulated, reduced *en masse*, 97.
- Femur, cranium and os calcis, strumous disease of, resembling malignant growths, 145.
- " crude tubercle in the medullary cavity of, 147.
- " excision of the head of, in diseased hip-joint, 429.
- " extra-capsular fracture of the neck of, complicated with fracture of the trochanter, 428.
- Femur, head of, and acetabulum, disease of, 170.
- " necrosis of a portion of the head and neck of, 427.
- Fibrin, fluid, specimens of, 443.
- Fibrinous deposit, obstructing the left subclavian and the other arteries of the left upper extremity, 85.
- " in the walls of the heart, 281; report on, 282.
- " in the liver and spleen, 355.
- Fibrous degeneration and deposits in the substance of the heart, 273; report on, 275.
- " " connected with acute rheumatism, 276; report on, 279.
- " and fatty degeneration of the heart, 82.
- " tumor growing from the dura mater, near the cavernous sinus, 43.
- " of the cervix uteri, 138.
- " of the uterus, with diseased kidneys, 414.
- Filaria medinensis—the Guinea worm, 443.
- Fluid fibrin, specimens of, 443.
- Foramen ovale, sacculated expansion of the valve closing the, 80.
- Fore-arm, encephaloid tumor involving the deep flexor tendons, 448.
- Fracture, extra-capsular, of the neck of the femur, 428.
- " of the patella, rupture of the uniting ligament, after, 432.
- " of the skull, with injury to the brain, complicated with diseased kidneys, 230.
- " of the spine, without paralysis, 420.
- " of the spinous process of the axis, 143.
- " of the temporal bone, with injury to the brain, &c., 232.
- " of the trochanter, complicating extra-capsular fracture of the neck of the femur, 428.
- Fungoid disease of the bladder, 125.
- " of the groin, 187.
- " of the prostate, 130.
- Fungus hæmatodes of the eye, 183.
- Gall-bladder, portion of, discharged externally, 100.

- Gall-stones, chronic inflammation and thickening, &c., of the cœcum and ileum, from the lodgment of, 365.
- Gangrene of the extremities of an infant, 184.
- Gelatinous-looking matter from cysts in a kidney, 334.
- Glottis, a piece of meat in the chink of, which caused death by suffocation, 250.
- Groin, fungoid disease of, 187.
- Growth, morbid, of the cranial bones, causing great enlargement of the head, 415; report on, 416.
- Guinea worm—*filaria medinensis*, 443.
- Hair and string, two large masses of, from the stomach and duodenum, 327.
- Hand presentation; rupture of the uterus, 394.
- Head, diamond-shaped, from compression at birth, 225.
- " of femur, excision of, in diseased hip-joint, 429.
- " great enlargement of, caused by a morbid growth of the cranial bones, 415; report on, 416.
- " hydrocephalic, 228.
- " and neck of the thigh-bone, necrosis of a portion of, 427.
- Heart, aneurism of the left ventricle of the, 80.
- " child's, loud murmur from, during life, probably from tricuspid regurgitation, 72.
- " fatty degeneration of; rupture of the left ventricle, 262, 269.
- " " " ossification of the aorta, coronary arteries, and mitral valve, 270; report on, 272.
- " " " with aneurism of the abdominal aorta, &c., 310.
- " fibrous degeneration of, and deposits in the substance 273; report on, 275.
- " " " connected with acute rheumatism, 276; report on, 279.
- " fibrinous deposit in the walls of, 281; report on, 282.
- " general hypertrophy of, with diseased aortic valves, 299.
- Heart, fibrous and fatty degeneration of, 32.
- " hypertrophy of, with pericarditis, and extensive effusion into the pericardium, 261.
- " and kidneys diseased; great hypertrophy of the spleen, 334.
- " lying in the cavity of the left pleura; absence of the pericardium, 60.
- " and pericardium, ossification of, 66.
- " rupture of, consequent on fatty degeneration of, and softening of the brain, 264.
- " tuberculous mass projecting into both auricles of, with scrofulous tubercles of brain, 34.
- " tuberculous infiltration of, of an infant, the lungs remaining free, 260.
- Hemiplegia, epilepsy, softening of a corpus striatum, &c., 246.
- Hernia, double congenital, the cavity of the left tunica vaginalis being divided by an adventitious membrane, 360.
- " inguinal, operation for; intestinal obstruction, 357.
- " obturator, 94.
- " scrotal, omental sac in, 98.
- " strangulated femoral, reduced *en masse*, 97.
- Hip-joint, diseased, excision of head of femur in, 429.
- " left, chronic rheumatic arthritis of, 152.
- " osseous ankylosis of, 430.
- Hæmatodes, fungus, of the eye, 183.
- Hydatid abscess of the liver, opening into the right pleural cavity, 341.
- Hydrocephalic head of a male child, four months old, 228.
- Hypertrophy, and enormous dilatation of the colon, &c., 106.
- " of the epidermoid and dermoid laminae of the membrana tympani, 178.
- " of the heart, with pericarditis, &c., 261.
- " " general, with diseased aortic valves, 299.
- " of the spleen, with crystals in its substance; ulceration of the colon, &c., 329.
- " " with diseased heart and kidneys, 334.

- Ileum, adhesion of the appendix vermiformis to, causing internal strangulation, 101.
- " and cæcum, chronic inflammation and thickening of, &c., from the lodgment of gall-stones, 365.
- " diverticulum from the lower portion of, 366.
- " obstruction of, by adhesion to an enlarged uterus, 108.
- " strangulation of, by omentum, intestinal obstruction, &c., 111.
- Iliacus and psoas, ossified tendons of, 188.
- Infant, gangrene of the extremities of, 184.
- Infiltration, tuberculous, of the heart, the lungs remaining free, 260.
- Inflammation, secondary, and diseased elbow-joint, following a burn, 175.
- " and thickening of the ileum and cæcum from gall-stones, 365.
- Inguinal hernia, operation for intestinal obstruction, 357.
- Internal strangulation, between the appendix vermiformis, adherent to the ileum, and a band of false membrane, 101.
- " " of a small intestine by a strong fibrous band from the mesentery, 362.
- Intestinal obstruction, 111, 357.
- Intestine, disease of, following strangulation eleven months previously, 95.
- " large, sloughing and ulceration of, from dysentery, 363.
- " perforation of, 346, 364.
- " small, internal strangulation of, 362.
- Inversion, chronic, of the uterus, 140.
- Jaw-bone, lower, disease of, 425.
- " " necrosis of, 169.
- " " exfoliation of the alveolar process, 423.
- Joints, five, affected with chronic rheumatic arthritis in the same person, 155.
- Kidney, cystic, 131.
- " diseased, complicating fracture of the skull, &c., 230.
- " gelatinous-looking matter from cysts in, 384.
- Kidney, indistinct morbid deposit in, 384; report on, 385.
- " malformed, 116.
- " the left, stone in, 376.
- " serous cysts in, 377; report on, 379.
- " " 381; report on, 381.
- " single cysts in, 382.
- Kidneys, bladder and prostate, disease of, 126.
- " lungs and spleen, diseased, after empyema, 259.
- " and heart diseased, with great hypertrophy of the spleen, 334.
- " diseased, with fibrous tumor of the uterus, 414.
- Knee-joint, amputation below; congenital stump, 434.
- " chronic rheumatic arthritis of, 151.
- " diseased, 176.
- Labyrinth, disease of the base of the brain, extending from the tympanum through, 438.
- Laceration, extensive, of the liver, 344.
- " of the right lateral sinus, 229.
- " of the sigmoid flexure of the colon, 93.
- Laryngismus stridulus, thymus gland of a child deceased from, 185.
- Larynx surrounded by cancerous growth, 56.
- " and trachea, diseased, seven days after tracheotomy, 249.
- " " phthisical ulceration of, 54.
- Lateral sinus, the right, laceration of, with extensive extravasation of blood between the bone and dura mater, 229.
- Leg, peculiar tumor taken from the, 450.
- Lens, crystalline, converted into a calcareous material, 183.
- Lithotripsy, bladder of a man who had twice undergone, 118.
- " portions of calculi impacted in the bladder after, 119.
- Liver, abscess of, in a child, 115.
- " " consecutive to dysentery, 339.
- " " causing suppurative peritonitis, with intestinal perforation, 346.

- Liver, abscess of, opening into right pleura and lung, 356.
- „ acute abscess of, consecutive to enteritis, 349.
- „ hydatid abscess of, opening into the right pleural cavity, 341.
- „ doubtful morbid deposit in, 353; report on, 354.
- „ extensive laceration of, the patient surviving seven weeks, 344.
- „ echinococcus from an acephalocyst in, 352.
- „ and spleen, fibrinous deposit in, 355.
- „ peritoneum, malignant disease of, with cystic ovary, 404.
- „ stomach and ovaries, cancer of, 409.
- Loin, the left, artificial anus made in, on account of diseased rectum, 371.
- Lung, carcinoma of, 55.
- Lungs, abscess of liver opening into, 339, 356.
- „ ossifying enchondromatous tumor of, 58.
- „ pleura and pericardium, &c., cancer of, 251.
- „ spleen and kidneys, diseased, after empyema, 259.
- Malformation of the aortic valves, 296.
- „ of the pulmonary semilunar valves, 301.
- „ congenital, of the external ear and meatus, 435.
- „ „ of the oesophagus, 91.
- Malformed and diseased aortic valves, 289; report on, 291.
- „ kidney, 116.
- Malleolus, the right, malignant disease of the integuments of, with secondary encephaloid deposits, 195.
- Mastoid cells, cholesterine in, 441.
- Maxillary sinus, section of a mass of bone removed from, 168.
- Meatus, external auditory, affections of, originating disease in the cerebral cavity, 37.
- „ „ molluscous tumors in, 177.
- „ „ effects of molluscous tumors in, 177.
- „ „ catarrhal inflammation of, causing necrosis of the squamous portion of the temporal, 440.
- Meatus and external ear, congenital malformation of, 435.
- Mediastinum, anterior, encephaloid tumor in, 254; report on, 258.
- „ posterior, cancer of, 253.
- Medullary cancer of the radius and carpus, 170.
- „ cavity of the femur, crude tubercle in, 147.
- Membrana tympani, hypertrophy of the epidermoid and dermoid laminae of, 178.
- Menstruation, membranous, 392.
- Mesentery, omentum and pleura, cancer of, 101.
- „ a strong fibrous band from, causing internal strangulation of a small intestine, 362.
- Mitral valve, aneurism of, 76.
- „ „ and left ventricle, aneurism of, 285.
- „ „ ossification of, 271.
- „ „ valvular disease, 76.
- „ „ and tricuspid apertures, extreme contraction of, from old endocarditis, 283.
- Molluscous tumors in the external auditory meatus, 177; effects of, 177.
- Muscular effort, injury of aortic valves from, 71.
- Neck of femur, extra-capsular fracture of, complicated by fracture of the trochanter, 428.
- „ and head of the femur, necrosis of a portion of, 427.
- „ tumor at the root of, 189.
- „ „ „ caused by a peculiar disposition of the large vessels, 302.
- Necrosis of the entire lower jaw, 169.
- „ „ lower jaw; exfoliation of the alveolar process, 423.
- „ „ fractured ends of the tibia; separation of the sequestrum, thirteen months later, 431.
- „ „ tibia; amputation, 433.
- „ „ whole shaft of the tibia, together with the superior epiphysis, 165.
- „ of a portion of the head and neck of the femur, 427.
- „ scrofulous, of the three upper

- lumbar vertebrae, with incipient double psoas abscess, 150.
- Necrosis of the squamous portion of the temporal, caused by catarrhal inflammation of the external meatus, 440.
- Neuroma of the auditory nerve, 49.
- Obstruction by fibrinous deposit of the left subclavian, &c., 85.
- " of the ileum, by adhesion to an enlarged uterus, 108.
- " intestinal, 111, 357.
- Obstructive disease of the aortic valves, dependent on malformation, 287.
- " and regurgitant disease of the aortic valves, 75, 77.
- " " of the aortic orifice, 283.
- Obturator hernia, 94.
- (Esophagus, congenital malformation of, 91
- " ulceration of, perforating the pericardium, 315.
- Omental sac in a scrotal hernia, 98.
- Omentum, mesentery, and pleura, cancer of, 101.
- " strangulation of ileum by, 111.
- " remarkable cyst in, 374.
- Os calcis, femur and cranium, strumous disease of, resembling malignant growths, 145.
- Osseous ankylosis of the hip-joint, 430.
- Ossification of the aorta, coronary arteries, and mitral valve, 271.
- " of the heart and pericardium, 66.
- " of the pericardium, 65.
- Ossified tendons of the psoas and iliacus muscles, 188.
- Otoconia in one of the membranous semicircular canals of the internal ear, 436.
- Ovarian cyst, piece of bone and teeth from, 133.
- " dropsy, portion of abdominal parietes, from a woman tapped for, 141.
- Ovaries, cystic, with malignant disease of the liver and peritoneum, 404.
- " liver, stomach, and peritoneum, cancer of, 403.
- " and uterus, deposit of scrofulous matter in, 136.
- Ovary, cholesteatomatous and cystic tumor of, 401.
- Ovum, blighted, 137.
- Paralysis, fracture of the spine without, 420.
- Parietal bone, large exostosis from, 149.
- Parietes, abdominal, portion of, from a woman tapped for ovarian dropsy, 141.
- Parturition, fatty degeneration of the uterus after, 395; report on, 395.
- Patella, rupture of the uniting ligament after fracture of, 432.
- Peculiar disposition of the large vessels, causing a tumor at the root of the neck, 302.
- Pelvic bones, dura mater, &c., encephaloid growths connected with, 226.
- Pelvis, large cyst in, containing great numbers of accephalocysts, 375.
- Perforation of intestine in typhoid fever, 364.
- Pericarditis, with extensive effusion into the pericardium, 261.
- Pericardium, absence of, the heart lying in the cavity of the left pleura, 60.
- " aneurism of the aorta bursting into, 87.
- " and endocardium, rupture of, 67.
- " and heart, ossification of, 66.
- " ossification of, 65.
- " pleura, lungs, &c., cancer of, 251.
- " extensive effusion into, with pericarditis and hypertrophy of the heart, 261.
- " ulceration of the œsophagus perforating the, 316.
- Periostitis of the tibia, 167.
- Peritonitis, suppurative, caused by abscess of the liver, with intestinal perforation, &c., 346.
- Peritoneum, and liver, malignant disease of, with cystic ovaries, 404.
- " stomach and ovaries, cancer of, 409.
- " uterus, and Fallopian tubes, deposit of tubercle in, 398; report on, 400.
- Petrous portion of the temporal bone, caries of, with polypus of the ear, and abscess of the cerebellum, 179.

- Pharynx, trachea, &c., with a piece of meat in the rima glottidis, which caused suffocation, 250.
- Phthisical ulceration of the larynx and trachea, 54.
- Phthisis, arrest of, in the third stage, 50.
- Placentæ, diseased, 142.
- Pleura and lung, the right, abscess of the liver opening into, 356.
- „ lungs, pericardium, &c., cancer of, 251.
- „ omentum and mesentery, cancer of, 101.
- Pleural cavity, the right, hydatid abscess of the liver opening into, 341.
- Polypous excrescences of the bladder, 127.
- Polypus of the ear, with caries of the petrous portion of the temporal bone, and abscess of the cerebellum, 179.
- Preparations, illustrative, of chronic rheumatic arthritis, 153.
- Prostate, bladder, and kidneys, disease of, 126.
- „ enlarged, with sacculated bladder, 124.
- „ great enlargement of, 389.
- „ gland, fungoid disease of, 130.
- Psoas abscess, incipient, double, with scrofulous necrosis of the lumbar vertebræ, 150.
- „ and iliacus muscles, ossified tendons of, 188.
- Pulmonary artery and aorta, transposition of, 63.
- „ semilunar valves, malformation of, 301.
- Radius and carpus, medullary cancer of, 170.
- Recurrent nerve, compressed by an aneurism of the aorta, morbid anatomy of, 304.
- Rectum, diseased, artificial anus made in the left loin for, 371.
- „ protruded portion of, cut off, 370.
- Regurgitant and obstructive disease of the aortic orifice, 288.
- „ „ of the aortic valves, 75, 77.
- Regurgitation through the left auriculo-ventricular aperture, from dilatation of the orifice, 286.
- Rheumatic arthritis, chronic, of the knee-joint, 151.
- „ „ of the left hip-joint, 152.
- „ „ preparations illustrative of, 153.
- „ „ of five joints in the same person, 155.
- „ „ enlargement of the articular extremities of bones in, 156.
- „ symptoms, associated with abscess of the brain, 236.
- Rheumatism, acute, connected with fibrous degeneration and deposits in the substance of the heart, 276; report on, 279.
- Rupture of the brachial artery, ten days after compound dislocation of the elbow-joint, 302.
- „ of the endocardium of both auricles, and of the pericardium of the left auricle, the consequence of violence, 67.
- „ of the septum ventriculorum, extending through the walls of the right ventricle, 69.
- „ of uniting ligament, after fracture of patella, 432.
- „ of the uterus; hand presentation, 394.
- Sacculated bladder, 126.
- „ with enlarged prostate, 125.
- „ expansion of the valve closing the foramen ovale, 80.
- Sarcinæ from the stomach of a boy, 328.
- Scrofulous matter, deposit of, in the uterus and ovaries, 136.
- „ necrosis of lumbar vertebræ, with incipient double psoas abscess, 150.
- „ tubercles of the brain, with tuberculous mass projecting into both auricles of the heart, 34.
- Scrotal hernia, omental sac in, 98.
- Section of a mass of bone removed from the maxillary sinus, 163.
- Semicircular canals, membranous, of the internal ear, otoconia in, 436.
- Semilunar pulmonary valves, malformation of, 301.
- Septum, ventricular, small aneurism in, 287.
- „ ventriculorum, rupture of, 69.

- Sigmoid flexure of the colon, laceration of, 93.
- Sinus, the right lateral, laceration of, 229.
- " maxillary, section of a mass of bone removed from, 168.
- Skull, dura mater, and brain, encephaloid tumors connected with, 173.
- " fracture of, with injury to the brain, complicated by diseased kidney, 230.
- Sloughing and ulceration of the large intestines from dysentery, 363.
- Softening of the brain, caused by spontaneous coagulation of blood in the carotids, 40.
- " " with abscess, connected with caries of the temporal bone, 241.
- " " red and white, 242.
- " " connected with fatty degeneration and rupture of the heart, 264.
- " of a corpus striatum, 246.
- Spleen, enlarged, examination of three specimens of, 333.
- " " excess of white corpuscles of the blood in, 338.
- " great hypertrophy of, with diseased heart and kidneys, 334.
- " hypertrophy of, and crystals in: ulceration of the colon, 329.
- " lungs and kidneys, diseased, after empyema, 259.
- " and liver, fibrinous deposit in, 355.
- " unorganised deposit in, 337.
- Splenic murmur, hypertrophy of the spleen, 329.
- Spina bifida, with double talipes varus, 455.
- Spine, fracture of, without paralysis, 420.
- Spinous process of the axis, fracture of, 143.
- Squamous portion of the temporal bone, necrosis of, caused by catarrhal inflammation of the external meatus, 440.
- Stomach and duodenum, section of two large masses of hair and string from, 327.
- " liver, peritoneum, and ovaries, cancer of, 409.
- " of a boy, sarcinae from, 328.
- Stone in the left kidney, 376.
- Strangulated femoral hernia, reduced *en masse*, 97.
- Strangulation, eleven months previously, causing disease of intestine, 95.
- " internal, of a small intestine by a fibrous band from the mesentery, 362.
- " " between the appendix vermiformis, adherent to the ileum, and a band of false membrane, 101.
- " of the ileum by omentum; intestinal obstruction, 111.
- String and hair, section of two large masses of, from the stomach and duodenum, 327.
- Strumous disease of the os calcis, femur and cranium, resembling malignant growths, 145.
- Stump, congenital; amputation below the knee, 434.
- Subclavian, the left, obstruction of, by fibrinous deposit, 85.
- Suffocation caused by a piece of meat in the rima glottidis, 250.
- Talipes varus, double, with spina bifida, 455.
- Teeth and a piece of bone, from an ovarian cyst, 133.
- Temporal bone, caries of, with general softening and abscess of the brain, 241.
- " fracture of, with injury to the brain, hemorrhage, &c., 232.
- " necrosis of the squamous portion of, caused by catarrhal inflammation of the external meatus, 440.
- Thigh, tumor removed from, 451.
- Thigh-bone, necrosis of a portion of the head and neck of, 427.
- Thymus gland of a child, deceased from laryngismus stridulus, 185.
- Tibia, necrosis of shaft of, and of the superior epiphysis, 165.
- " of the fractured ends of; separation of the sequestrum thirteen months later, 431.
- " amputation, 433.
- " periostitis of, 167.
- Trachea and larynx, phthisical ulceration of, 54.
- " " diseased, seven days after tracheotomy, 249.

- Trachea, pharynx, &c., with a piece of meat in the rima glottidis, which caused suffocation, 250.
- Tracheotomy, diseased larynx and trachea seven days after, 249.
- Transposition of the aorta and pulmonary artery, 63.
- Tricuspid and mitral apertures, extreme contraction of, from old endocarditis, 283.
- " regurgitation, loud murmur from child's heart during life, probably from, 72.
- Trochanter, fracture of, complicating extra-capsular fracture of the neck of the femur, 428.
- Tubercle, crude, in the medullary cavity of the femur, 147.
- " deposit of, in the uterus, Fallopian tubes and peritoneum, 398; report on, 400.
- Tubercles, scrofulous, of the brain, with tuberculous mass projecting into both auricles of the heart, 34.
- Tuberculous infiltration of the heart, the lungs remaining free, 260.
- Tumor, attached by a pedicle to the areola of the left breast, 186.
- " of the cerebellum, 43.
- " cholesteatomatous, of the brain, 44.
- " " and cystic, of the ovary, 401.
- " congenital, portions of bones found in, 445.
- " cutaneous fatty, 454.
- " encephaloid, of the fore-arm, 448.
- " " in the anterior mediastinum, 254; report on, 258.
- " at the root of the neck, 189.
- " " " caused by a peculiar disposition of the large vessels, 302.
- " of the breast, 191.
- " fibrous, growing from the dura mater, near the cavernous sinus, 43.
- " " of the cervix uteri, 138.
- " " of the uterus, with diseased kidneys, 414.
- " ossifying enchondromatous, of the lungs, 58.
- " peculiar, taken from the leg, 450.
- " in the posterior lobe of the right hemisphere of the brain, 246; report on, 247.
- Tumor, removed from the thigh, 451.
- " ulcerated cancerous, of the right anterior arch of the fauces, 315.
- Tumors, aneurismal, of the lower extremity, 88.
- " encephaloid, connected with the skull, dura mater, and brain, 173.
- " molluscous, in the external auditory meatus, 177; effects of, 177.
- Tunica vaginalis, cavity of, divided by an adventitious membrane, 360.
- Tympanum, disease of the base of the brain, extending from, through the labyrinth, 438.
- Typhoid fever, perforation of intestine in, 364.
- Ulceration of the colon, with hypertrophy of the spleen, 329.
- " extensive cancerous, of the face, 192.
- " malignant, of the integuments of the right malleolus, &c., 195.
- " of the œsophagus, perforating the pericardium, 316.
- " and sloughing of the large intestines from dysentery, 363.
- Uniting ligament, rupture of, after fracture of the patella, 432.
- Ureter and bladder, calculi in, 390.
- " calculi impacted in the, with diseased bladder, 117.
- Uterus, coil of intestine adherent to, by cancerous matter; intestinal obstruction, &c., 111.
- " chronic inversion of, 140.
- " enlarged, adhesion to, causing obstruction of the ileum, 108.
- " Fallopian tubes, and peritoneum, deposit of tubercle in, 398; report on, 400.
- " fatty degeneration of, after parturition, 395; report on, 395.
- " fibrous tumor of, with diseased kidneys, 414.
- " " of the neck of, 138.
- " and ovaries, deposit of scrofulous matter in, 136.
- " rupture of; hand presentation, 394.

- | | |
|---|---|
| Valve closing the foramen ovale, sacculated expansion of, 80.
Ventricle, the left, of the heart, aneurism of, 80.
" " " rupture of, from fatty degeneration, 262, 269.
" " and mitral valve, aneurism of, 285.
Ventricular septum, small aneurism in, 287. | Vertebral canal, deposit of fat in the cervical portion of, 248.
Vertebrae, lumbar, scrofulous necrosis of, with double psoas abscess, 150.
Vessels, new, on the surface of the arachnoid membrane, after an accident, 34.
Vestibule, calcareous matter in the cavity of, 436. |
|---|---|

THE END.

LONDON:

Printed by SAMUEL BENTLEY and Co.,
 Bangor House, Shoe Lane.

INTRACRANIAL ANEURISMS.

"THE following table was unavoidably omitted from the preceding part of the Transactions, at the 48th page of which it is alluded to, and briefly summed up.

This delay of publication has enabled me to add about a dozen cases, which little affect the general conclusions previously deduced. They raise the proportion of death from rupture to nearly one half, instead of rather more than one third, of the whole number: and they lower the average age from forty-two to forty.

Such a table can scarcely be called a pathological summary. But even the few results arrived at seem interesting; and are so far novel, that the greater part of the cases on which they are founded have never before been collected. It is hoped that the references will be found a convenient substitute for the insertion of further details, in those instances where there are any to refer to.

I have to express my thanks to the gentlemen—some of them members of this society—whose kindness has supplied me with the hitherto unpublished cases to which their names are appended."†

No	Authority.	Sex	Age	Size.	Site.	Termination.
1	Med. Gaz. vol. xxiii. p. 453.	M.	35	Swan-shot.	Middle cerebral	Rupture.
2	Ditto for 1846, p. 212.	F.	62	Filbert.	Posterior communicating	Rupture.
3	Lancet for 1826, p. 157.	M.	45?	Walnut	Middle cerebral	Accidental (fever). Rupture.
4	Bright's Med. Reports, vol. ii. p. 267.	M.	19	Large pea.	Probably a branch of mid. cerebral.	
5	Ditto, vol. iii. p. 614.	M.	45	Filbert	Branch of middle cerebral	Accidental (coincident cerebral hæmorrhage).
6	Lancet for 1829, p. 727.	M.	35	Chestnut	Basilar	Congestion.
7	Ditto for 1833, p. 393.	M.	54	Pea	Basilar	Pressure on medulla oblongata

† Dr. Brinton's Table of Cases of Intracranial Aneurisms is inserted here by permission of the council. The pages are so numbered that it can be placed in binding in sequence to the communication to which it has reference.

No	Authority.	Sex	Age	Size.	Site.	Termination.
8	Medical Times, 1849, p. 381.	M.	35	Pea?	Basilar	Rupture.
9	Ditto vol. xvi. p. 591.	M.	40	Walnut	Basilar	Congestion.
10	Medico-Chirurgical Review, vol. x. p. 211.	M.	24	Pea?	Vertebral	Rupture.
11	Ditto, ditto, p. 585.				Basilar	Rupture.
12	Ditto, ditto, ditto.	F.	21		Basilar	Rupture.
13	Ditto, vol. xiv. p. 234.	F.	65		Middle cerebral	Rupture.
14	Trans. of Soc. for improving Med. and Sur. Knowl. vol. ii. p. 192.	F.	64	One, filbert One, pea?	Both internal carotids at the sella turcica	Mania.
15	Dublin Medical Journ. vol. xxv. p. 507.	M.	54	Small apple, multilocular	Posterior cere- bral	Convulsions, afterwards prostration.
16	Lond. and Edin. Med. Monthly Jour., July, 1842.	M.	49	Three; the largest of filbert size.	Both carotids (post-commu- nicating, ab- sent on right side).	Inflammation and apoplexy.
17	Lon. Med. and Phys. Jour. vol. lviii. p. 498.	F.	39	Walnut	Branch of the posterior com- municating	Compression.
18	Edin. Med. Jour., vol. lvii. p. 69.	M.	14	Walnut	Basilar (also an extracranial of int. carotid)	Accidental (poi- soned by lytta).
19	American Jour. of the Med. Sciences, vol. xviii. p. 122.	M.	40?	Filbert	Vertebral	Epilepsy.
20	Ditto, vol. xi.	M.	47	Pigeon egg.	Basilar	Rupture (after two months).
21	Lond. Journ. of Med., 1849, p. 301.	F.	39	Field bean	Internal carotid	Coincident cere- bral hæmorrhage.
22	Ditto, 1850, p. 824.	F.	18	Filbert	Posterior com- municating	Rupture.
23	Med. Quar. Review, vol. iii. p. 434.	M.	45	Filbert	Middle cerebral	Rupture.
24	Ditto, ditto.	M.	30	Double pea	Ante. cerebral	Rupture.
25	Ditto, ditto.	F.	56	Minute	Branch of mid- dle cerebral	Apoplexy (co- incident).
26	Gazette des Hôpitaux, 1850.	M.	—	Almond	Vertebral	Epilepsy.
27	Archives Générales de Médecine, vol. xii. p. 482.	M.	58	Bean	Basilar	Rupture.
28	Ditto, vol. x. p. 421.	M.	59	Walnut	Basilar	Rupture.
29	Ditto, ditto, p. 423.	F.	59	Small bullet	Anterior com- municating	Rupture.
30	Gaz. Médicale, 1837, p. 715.	M.	60	Filbert	Carotid	Rupture.
31	Lancette Française, t. v. p. 20.	M.	60	Large and spherical.	Middle cerebral	Softening of the brain and pa- ralysis.

No	Authority.	Sex	Age	Size.	Site.	Termination.
32	Nebel's Inaugural Dissertation, (Heidelberg, 1834).	F.	28	Walnut	Ante. cerebral	Delirium.
33	Henle and Pfeufer's Zeitschrift, vol. i.	M.	41	Bean	Basilar	Rupture.
34	Graefe and Walther's Journ. vol. x. p. 577.	F.	20	Walnut	Middle meningeal	Accidental (a surgical operation).
35	Sandifort's Dissertations No. iii. p. 350.	F.	52		Internal carotid on foramen lacerum medius	Disease of heart?
36	Trans. of the Path. Soc., 1847-8, s. 212.	F.	52		Internal carotid	Rupture.
37	Dr. Crisp's Treatise on the Arteries, p. 268.	M.	45	Small	Basilar	Apoplexy.
38	Ditto.	M.	14	Small	Ante. cerebral	Rupture.
39	Hodgson on the Arteries, p. 76.	F.	20	Bean	Basilar	Rupture.
40	Ditto, p. 132.	M.	57	Pea	Ante. cerebral	Diseased brain.
41	Ditto, p. 133.	M.	25	Cherry	Ante. cerebral	Rupture.
42	Porter on Aneurism, p. 62.	F.	52	Filbert	Basilar	Epileptic convulsions.
43	Dr. Todd.	M.	50?	Bean	Basilar	Urinary disease.
44	Mr. Shaw.	F.	20	Horse-bean	Poste. cerebral	Epilepsy.
45	Dr. T. F. Mackenzie, (through Dr. Gairdner).	F.	45?	Large bean	Probably middle cerebral	Rupture.
46	Dr. Andrew, (through Dr. Gairdner).	M.	38	Fusiform ; goose-quill	Basilar	Disorganization of brain in its vicinity.
47	Mr. Prescott Hewett.	M.	65	Small bean	Internal carotid	Disease of urinary organs (neighbouring part of brain disorganized).
48	Mr. J. H. Lakin.	M.	45?	Pea	Basilar	Accidental.
49	Dr. Hamilton Roe.	M.	45	Walnut	Basilar	Pressure.
50	Ditto.	F.	21	Large egg	Middle cerebral	Pressure.
51	Cruveilhier.	—	—	Filbert	Vertebral	
52	Amussat.	—	—		Carotid	

Dr. BRINTON, *June*, 1852.

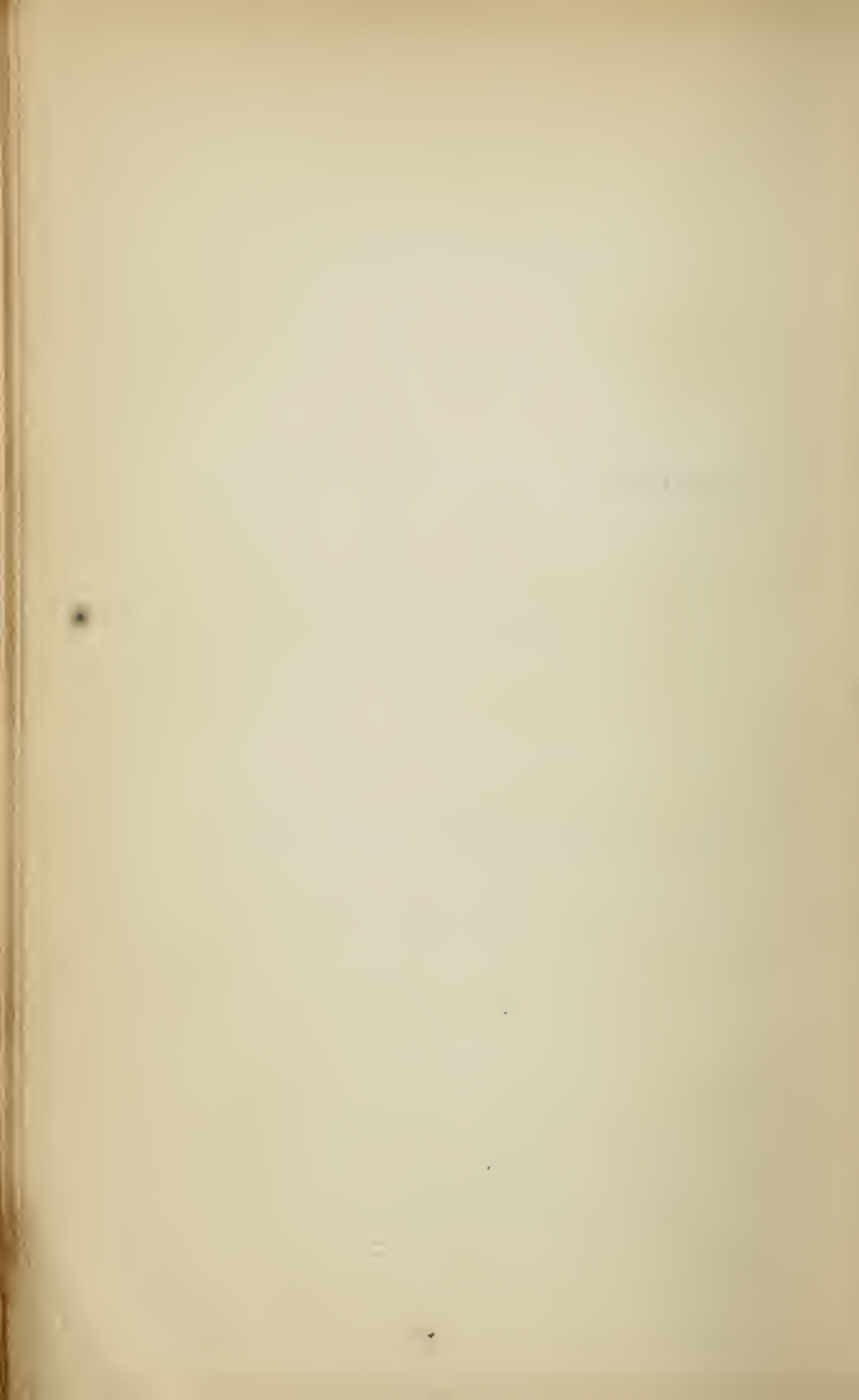


TRANSACTIONS
OF THE
PATHOLOGICAL SOCIETY OF LONDON.

VOLUME THIRD.

INCLUDING THE REPORTS OF THE PROCEEDINGS FOR THE
SESSIONS 1850-51 AND 1851-52.

LONDON:
PRINTED BY SAMUEL BENTLEY AND CO.,
BANGOR HOUSE, SHOE LANE.



THE Sixth Part, forming the Report of the Proceedings of the Society during the Session 1851-52, completes the Third Volume of the Society's Transactions.

THE COUNCIL think it right to repeat that the exhibitors are alone responsible for the descriptions given of the Specimens exhibited by them, the only change made in the reports furnished by the authors, being such verbal alterations as were absolutely necessary.

33, GEORGE STREET, HANOVER SQUARE,
August, 1852.

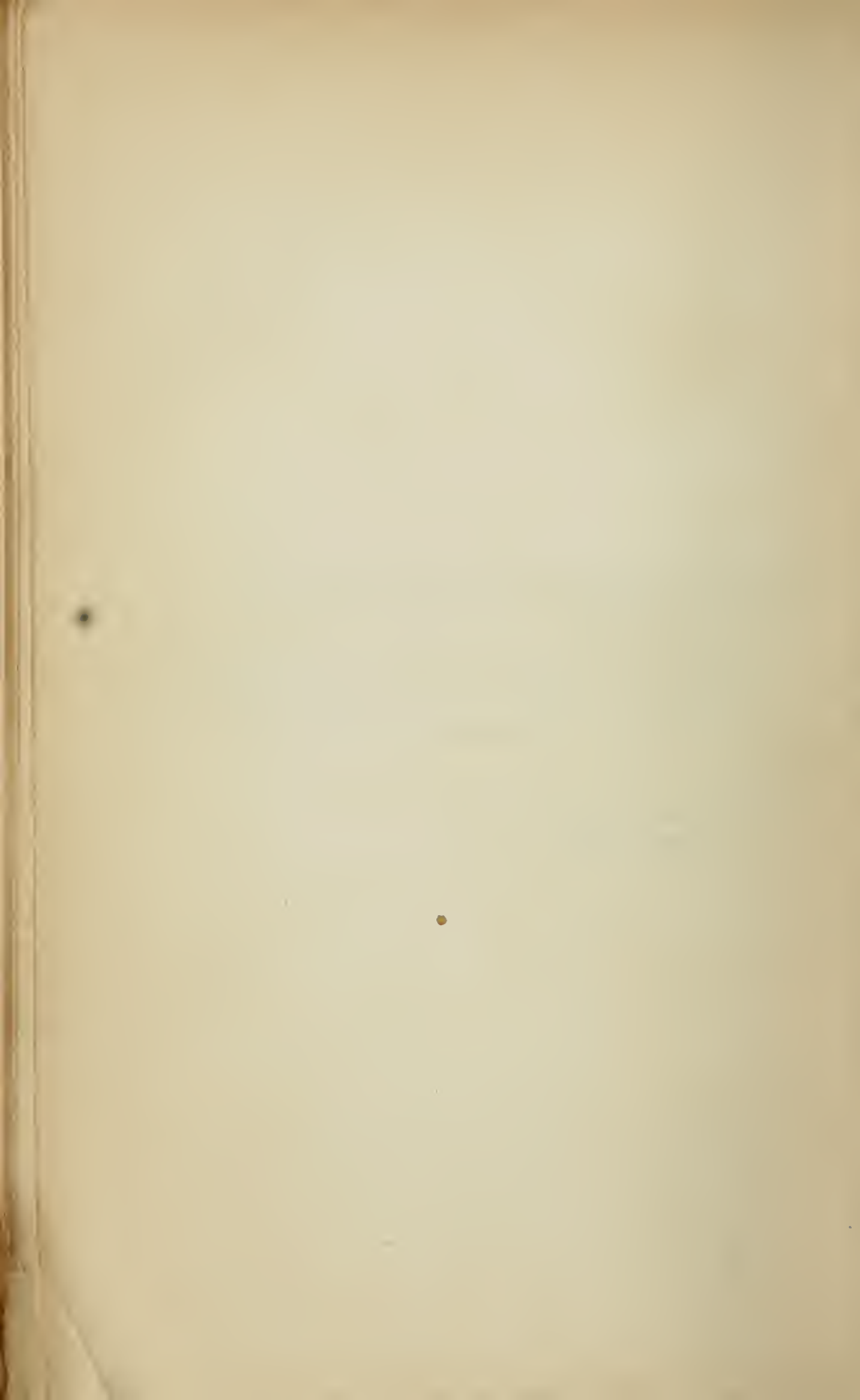


TABLE OF CONTENTS

OF VOLUME III.

	PAGES.
LISTS OF OFFICERS AND MEMBERS DURING THE SESSIONS	
1850-51, AND 1851-52	5, 199
BYE-LAWS AND REGULATIONS	15,
LISTS OF SPECIMENS EXHIBITED DURING THE SESSIONS	
1850-51, AND 1851-52	23, 209
DISEASES, ETC. OF THE NERVOUS SYSTEM	34, 225
DISEASES, ETC. OF THE RESPIRATORY ORGANS	50, 249
DISEASES, ETC. OF THE HEART AND OTHER ORGANS OF	
CIRCULATION	60, 260
DISEASES, ETC. OF THE DIGESTIVE ORGANS	91, 315
DISEASES, ETC. OF THE URINARY AND GENERATIVE	
ORGANS	116, 376
DISEASES, ETC. OF THE OSSEOUS SYSTEM	143, 415
DISEASES, ETC. OF THE EYE AND EAR	177, 434
MISCELLANEOUS SPECIMENS, TUMORS, ETC.	184, 441
INDEX	477

